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REVIEW OF  
FEDERAL TRANSPORTATION STATISTICS

Government  
Publications

D. Eldon





*Don Goldil*

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ROYAL COMMISSION ON TRANSPORTATION

REVIEW OF FEDERAL TRANSPORTATION STATISTICS

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D. Eldon





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REVIEW OF FEDERAL TRANSPORTATION STATISTICS

Recommendations

Conceptual Basis

1. Transportation is a significant phase of the production processes of Canadian industry. Accurate and consistent information should be given promptly to the public to permit analysis of the efficiency of transportation services and their role in our economic life. The 1960's will be a decade of increasing competition in world markets, and Canadian industry will require efficient, low-cost transport in its drive to retain and expand exports. The 1960's will also be a decade of increasing competition and continuing technological change within the transportation industry itself. Therefore, the Government of Canada should devise a program to meet the statistical needs of a foreseeable future in which public attention will centre on competition in transport and competition in world markets.

2. In this environment, the public will require more information about transport services which are most likely to grow in significance - trucking, air-cargo, and mixed-media traffic. Also, the public will need more information on the relative efficiency of the different means of transport, and the extent to which governments subsidize them. Greater emphasis must be placed on provision of comparable, internally consistent, historically continuous statistics of traffic by road, rail, water, and air.

Canadian Industrial Freight Traffic Survey

3. A Canadian Industrial Freight Traffic Survey, similar to the Census of Transportation now awaiting provision of funds by the United States Congress, would help to meet these needs. The Survey would be taken every three to five years from documents retained by shippers of







freight. Appropriate techniques for sampling the required information could be developed by the Dominion Bureau of Statistics, initially for important industries with a manageably small number of respondents, and later for all mining, processing and manufacturing industries. From the Survey, statistics of the volume of traffic moving by each carrier could be developed, with a breakdown according to commodity, region of origin and destination of shipments, and revenue collected per ton-mile. Such information would make possible greatly improved analysis of traffic handled by competing carriers, and of the potential economies from through routing of traffic. For the first time traffic statistics would be available with commodity information uniform for all carriers and comparable with other statistical series, such as the international trade statistics, which are prepared according to the Standard Commodity Classification of the Dominion Bureau of Statistics. A Canadian Industrial Freight Traffic Survey would provide the statistical material required for further analysis of the role of transport services in the location of industry and in production processes. Statistics from the Survey would improve forecasts of traffic in important commodities, and estimates of carriers' future costs and appropriate rates.

#### Passenger Traffic Survey

4. In the interest of more efficient handling of passengers, a Passenger Traffic Survey should be devised to provide statistics of passenger flow between various regions by each means of transport. The Survey, to be conducted every three to five years, would be based on reports from carriers, hotels and motels, and from the passengers themselves. Resulting information on passenger traffic patterns would be useful to the carriers and to industries depending on travel and tourists. Also, statistics from the Survey, in conjunction with improved statistics of commercial truck traffic, would make it easier to decide on the proper allocation of costs of highway construction and maintenance to private and to commercial users.





### Index of Freight Rates

5. The pricing of transport services is so significant in competition among carriers, in public regulation of the industry, and in the costs of important manufacturing and primary industries, that an Index of Freight Rates should be designed to fill a gaping hole in our present statistics. Separate indexes should be published for rates charged by each type of carrier - rail, truck, airlines, and shipping companies - with appropriate sub-indexes for regional movements and for important commodity groups. For rail traffic, an Index for the years 1954 to 1960 could be prepared from the annual Waybill Analysis of the Board of Transport Commissioners. Subsequently, most of the information needed for constructing an accurate Index of Freight Rates for all media of transport would be available from a Canadian Industrial Freight Traffic Survey.

### Improvements to Existing Statistics

6. Existing statistical publications relating to transport should be re-examined from a conceptual standpoint by the Dominion Bureau of Statistics. If new information on traffic becomes available through an Industrial Freight Traffic Survey, it may be used to improve some existing statistics and to supersede others. Each statistical series published should fill a need in the over-all program. Unless re-examined periodically, statistical publications tend to immortality. A re-appraisal could eliminate redundant statistics, such as some of the tabulations published so late in Railway Transport, or result in the overhaul of a meaningless publication like Water Transportation which fails to give a clear picture of the Canadian shipping industry because amongst other defects it does not include a sufficient number of carriers.





7. Most of the existing statistical series dealing with traffic should, however, be continued in basically the same form. Traffic statistics prepared according to the commodity classification of the Association of American Railroads will still be useful in comparisons among railways. The Waybill Analysis: All-Rail Carload Traffic, published annually by the Board of Transport Commissioners, is sufficiently accurate to be of value to a number of users of statistics in its present form. It should be continued, but the sample size should not be increased, as funds can be better spent on a Canadian Industrial Freight Traffic Survey to give comparable information for all carriers. Although the method of preparing the publication need not be changed, responsibility for its publication should be shifted to the Dominion Bureau of Statistics.

#### Speed of Service

8. Speed and frequency of service provided by different carriers is an important aspect of transport output. The need for speed explains the growth in air cargo, for instance. Yet no statistics exist which give any useful information on speed and frequency of service. Sampling techniques should provide a means of developing useful statistics on the time element in transport service.

#### Integrate Passenger Statistics

9. Statistics of passenger traffic now scattered through a number of periodicals should be integrated in one publication. In this publication should be incorporated the results of the Passenger Traffic Survey.

#### Equipment Inventories

10. Inventories of plant and equipment of railways, truckers, airlines, and shipping companies should be related to the investment or





expenditure involved. The cost of the dieselization program, for example, should be shown against the quantities of diesel equipment and plant acquired by each major railway. The investment in aeroplanes and other equipment by major airlines should also be published.

### Technological Change

11. Some statistical series, such as locomotive-miles, become outdated with technological change. Horsepower-miles would more accurately provide a homogeneous measure of work done when the character of a locomotive is changing. There are many different measures of output and efficiency in the transport industry, and such statistics are easily misused. An explanation of the uses and limitations of statistics of output and of technical and economic efficiency could usefully be included in the text of statistical periodicals containing such data.

### Labour in a Time of Technological Change

12. Continuous and detailed statistics of employment, hours, and wages in the transportation industry are particularly important when labour is affected by technological change and automation. Historical continuity in statistics of railway employees' earnings and hours was destroyed by a change in the occupational classes and in the method of reporting earnings and hours at the end of 1955. An "hours worked" basis was substituted for "hours paid for". The railways should make available to the Dominion Bureau of Statistics for publication information on hours paid for and average compensation per hour paid for on a basis permitting comparisons of earnings and hours in each occupational category with data published prior to the end of 1955. Also data should be available in this form to permit comparison with other statistics of hours and earnings published by Dominion Bureau





of Statistics for other industries. Comparable statistical series of employment, hours, and earnings should also be published for other carriers - trucks, airlines, shipping, and urban transit. Statistics of unemployment of transport workers would also be useful.

#### Carriers' Costs

13. There is some demand for publication of the cost to carriers of handling freight and passengers between specific points. Statistics of the cost of particular transport operations are usually subject to the difficult problem of allocating sizeable joint costs. A formula could be devised by the Board of Transport Commissioners for making an arbitrary allocation of expenses to passenger and to freight service, or to intercity and suburban passenger traffic. Certainly it is important that the carriers themselves and the Board of Transport Commissioners have as accurate information as possible on the specific costs of moving passengers and freight in particular cases. It is not, however, advisable to give shippers of freight a weapon for completely undermining the "value of service" principle in railway ratemaking. If shippers knew exactly the costs of the carriers, they could use the information in raising objections to all rates above the "cost of service". Therefore, while improvements in cost determination by the carriers and the regulatory authorities should be encouraged, it is not in the public interest to publish estimates of "out-of-pocket" or variable costs of carriers handling particular types of traffic. The same objections do not, however, apply to the prices of transport services, for which more statistics are needed.

#### Specialized Industries

14. Certain specialized types of transport are likely to become increasingly important, and they could well be treated as distinct industries meriting publication of special statistics. Trucking of





milk, automobiles, and livestock, tanker fleets, furniture moving, and freight forwarders all fall into their own distinct categories, and it would be useful to begin publication of some statistics on the operations of each of these groups. In the warehousing and storage of goods, there are also some distinct categories which merit separate treatment, one example being customs sufferance warehouses.

#### Subsidies to Transport

15. While considerable information is now available on subsidies to railways, statistics of direct and indirect subsidies by governments to other forms of transport should be published. Sufficient information should be developed on traffic flows of commercial trucks and private motor vehicles and passengers to permit better studies of the extent to which different forms of highway traffic either are subsidized or pay their share of road costs through taxes and fees to governments. Also, it would be valuable to develop statistics showing the extent to which services utilized by airlines are subsidized. A subsidized carrier has an advantage in competition with other carriers. There is a cost in terms of efficiency in encouraging traffic by subsidies to move through channels it would not otherwise use. In view of the importance of handling traffic wherever possible by the most efficient means, the public should know the extent of subsidies to different media of transport and to specific companies.

#### Accidents

16. In addition to the existing accident statistics for each means of transport, it would be useful to include the cost of damage to persons and property and also the expenditures by governments and other organizations for prevention of specific types of accidents.





### Time Lags

17. The Dominion Bureau of Statistics should study the time lags in the production of annual publications dealing with transport. The average delay in publication of annual transport publications after the close of a year is more than six months. Long delays in publication reduce the usefulness of the information published, and any speeding of publication enhances the value of the statistics. Introduction of improved data processing equipment is not the only answer to long delays in publication, because the delays happen anyway. Administrative problems of securing prompt publication should be attacked vigorously.

### Cost of Program

18. The cost of this Program of Transportation Statistics is extremely difficult to determine - impossible, in fact, until the new and improved statistical series are designed and methods worked out. The exact design of the program is a matter for statistical experts in sampling and statistical methods in the Dominion Bureau of Statistics. The cost of the program will also depend upon whether changes are introduced all at once or over a period of time.

### Responsibility for Publication

19. Responsibility for the publication of statistics by the Government of Canada belongs primarily to the Dominion Bureau of Statistics. If a well coordinated statistical program is to be administered by the Government, it should in all important respects be carried out by this statistical agency of government. It is true that individual government departments and boards must prepare statistics for their own internal use tailored to their specification. This is true also of business firms in regard to transport statistics. The published statistics are never quite adequate for every use, and so private statistics for internal use become necessary. The danger





is that the statistics produced by a board or department will supersede those of the Dominion Bureau of Statistics. A board or department may argue that it has greater technical ability at its disposal than the Bureau. This may be true, but the statistics produced for public use by another body apart from the Dominion Bureau of Statistics may be less satisfactory from the standpoint of statistical validity and from the standpoint of comparability with other series. It is recommended, therefore, that Dominion Bureau of Statistics publish all of the transport statistics issued by the Federal Government in the form of periodicals. The annual Waybill Analysis now published by the Board of Transport Commissioners may be processed in its present manner, but the Dominion Bureau of Statistics should take responsibility for publication of this and all other regular statistical series.





## ROYAL COMMISSION ON TRANSPORTATION

CHAPTER 1USES OF TRANSPORTATION STATISTICS

To what extent do the transportation statistics published by the Government of Canada serve the uses which they might be expected to serve? This volume attempts to answer that question. The first necessary step in the accomplishment of this aim is to describe the uses of transport statistics, and the second is to describe what the existing statistical series contain. It should then be possible to match the present with the ideal situation and to speculate on what statistical feats are necessary to bring the two closer together. In matching ideal with actual situations, it is usually realistic to take a long view. In the case of transportation statistics a long view (of 20 years or so) provides the particular advantage of allowing time for full blossoming of advanced techniques for collection and processing of data with the use of high-speed electronic computers and related devices. The applications of this technology by the carriers and the statistical agencies of government are now only in bud, not in full bloom.

Transport as Part of the Production Process

The uses made of transportation statistics relate to a great variety of needs, but we can sum them up by saying that statistics are needed for an understanding of the transportation industry in itself and, almost more important, to clarify relationships between the transport component and other components of the economic process of production and sale of goods. Transportation has no separate life of its own. Transport carriers are instantly affected by any improvement or decline in the fortunes of every other industry. The close mutual





dependence of other industry upon transport, and of transport upon other industry creates a use for statistics which reflect the significance of transportation in the total production process of an industry. And also this dependence creates a need for industrial statistics which can be related to carriers' traffic and pricing of service. Existing statistics will be found to err on the side of treating transportation as an independent entity unrelated to other industrial processes.

Therefore, there is no harm in stating emphatically the importance of transport costs in relation to total production costs (especially in a country of vast distances), of transport charges in relation to costs and pricing policies of business firms, and the effect of transport costs on industrial location relative to markets and sources of supply. Published transportation statistics should be applicable to studies of such relationships.

Also, transport statistics should be (and are) available to relate transportation in a general way to total production of the economy and gross national product. Statistics of traffic or activity in the transport industry should appear in forms which permit their use as barometers of economic activity in particular industries and regions. And for all of these purposes it is important that comparable statistics of transportation "output" should be available for the different modes of transport.

At this point it is necessary to be more specific. Uses of transport statistics must be spelled out, both in regard to statistics of the transportation industry itself and statistics tying transportation in with other sectors of the economy.



### Pricing of Transport Services

One of the significant aspects of transportation service for which published statistics should be available is pricing. The price of transportation service is of vital importance to industry and consumers who must bear the cost. The price obtained by the carrier for transportation service significantly affects the revenue position and financial welfare of the carrier. Furthermore, the price of transport service is to a large extent regulated by the Government for good economic reasons such as the prevention of ruinous competition among firms with a heavy investment in fixed plant, and the prevention of unjust discrimination where the public might be at the mercy of a monopolistic carrier. Therefore, the pricing of transport service is something in which a remarkably large number of people have an important interest - almost all business firms, the consuming public, the regulatory agencies of government, and the carriers themselves whether they be truckers, railways, shipping companies, pipeline companies, or airlines. The price of transport services is of key importance in the affairs of the transportation industry itself and in its relations with the rest of the economy.

As a result of this, one might expect that there would be considerable information in the published statistics dealing with freight rates and the average revenue per ton-mile (or some other measure of transportation output) collected by the carriers. One would anticipate that some statistical measures would be available for comparing, for instance, the post-war increase in freight rates charged by trucks or railways for moving automobiles from plant to market and the increase in market prices of automobiles. As we shall see in the next chapter, there is no means of making such a comparison





with present statistics. Also, statistics dealing directly with freight rates relate almost exclusively to grain. And there are extremely serious gaps in the statistics dealing with revenue collected per unit of railway output. The great importance of the pricing of transport services is so far not reflected in published statistics.

Price is one of the focal points in competition among carriers. Price is one of the means by which an efficient carrier with low handling costs can divert traffic to himself. Consequently it would be useful to have a substantial amount of information on the price of freight service and passenger service offered by different carriers. It would be useful to have an index of the price of various transport services which could be related to the many other wholesale and consumer price indexes published by the Federal Government. And it would be useful to have information on freight charges for specific products moving between specific regions so that transport costs could be related to other processing costs.

#### Economic Efficiency of Transport Services

Another need which should be met by an ideal programme of transportation statistics is the need to measure efficiency of transportation services. There are two aspects of efficiency for which statistics should be provided - technical efficiency and economic efficiency. Technical efficiency relates to the performance of trains, trucks, terminals, and the many mechanical operations involved in provision of transport service. Economic efficiency brings in the dollar sign; it implies the provision of optimum service at minimum cost. Improvements in technical efficiency are bound to improve economic efficiency through a more economical use of resources. The measurement of economic efficiency involves the relationship between output or service and inputs of labour, materials,





plant and equipment, expressed in terms of dollars. Cost per ton-mile, for example, is one of the statistics which may be used to measure economic efficiency, provided that the nature of the service rendered and the location of the movement of freight are properly specified.

Economic efficiency is not a simple thing to measure. For example, the goal of economic efficiency cannot be established simply as minimum total transport costs over a given period of time, or a minimum proportion of gross national expenditure for transportation. A larger outlay might provide a much improved service which would tend to increase the gross national product. More freight might under some circumstances be sent by air, for instance; even though the transport cost per ton-mile would be much greater, the speed of service might be so great as to enlarge greatly the market for a perishable product. Nor can economic efficiency properly be judged by the condition of a carrier's income statement. Under some circumstances the provision of non-remunerative services by carriers may stimulate output of manufacturing or primary industries in an advantageous way.

The proper measurement of economic efficiency may require a considerable array of statistics which delineates costs of service, amounts of service or output (and its location), and also some yardsticks of what efficient performance is. The possibility of making valid comparisons between carriers' costs of providing similar services is necessary for the analysis of efficiency.

Many of the statistics needed for the measurement of economic efficiency are already published. There are statistics of output in terms of railway gross ton-miles, net ton-miles, and tons of freight. Comparable statistics are published for railway



for example), of distance, of speed, and of special services. Some combinations of different aspects of output are possible, such as "ton-miles" which measure both volume and distance. But there is no single unit of output which can be devised to cover every aspect of output. There is no way of getting around the complex variety of statistics needed for proper measurement of output, and existing statistics probably do not go far enough in providing the variety needed. At the same time, current statistical publications might be improved by more explanation of what is represented in figures of tons and ton-miles and some of the more sophisticated concepts like "gross ton-miles per train-hour". The layman sometimes does not know whether he can use a particular concept for his purpose or not, and the risk of misuse is considerable. More interpretive text in the Government statistical publications would provide some chart through difficult seas like measurement of railways' output.

Then there is the added difficulty of measuring carriers' costs in relation to output or services. There are difficult problems of allocating joint costs. An arbitrary formula could be devised by the Board of Transport Commissioners for separation of freight and passenger costs, or for separation of intercity from commuter passenger costs. The resulting figures of cost would still be arbitrary, however wise the designer of the formula. Still, trends in the allocated costs might provide useful indications of whether passenger expenses, for example, are increasing more rapidly than freight expenses. Progress is not impossible, but the statistical results will always require the most educated and intelligent interpretation. The answer to what traffic is remunerative and what traffic is not will not be revealed with crystal clarity.





The problem of proper interpretation raises the question of what information should be published and what should be available only to the carriers themselves or the regulatory authorities. The misuse of published statistics can be mischievous. And some statistics easily lend themselves to improper interpretation. It is clearly in the interest of the Board of Transport Commissioners, for instance, to have all statistics of cost and output which may throw light on the efficiency of different carriers. This does not mean that the information must be published. Also, it is in the interest of competing carriers to know each others' costs. A knowledge of other carriers' costs provides a useful yardstick for a railway or a trucker's own operations and pricing policy. From this standpoint, if some carriers' costs are published in meaningful form, then it is only fair that they should all be published - for trucks, ships, airlines, and pipelines as well as for railways. The error in this case could be in partial publication which could be to the advantage of the carriers who were allowed to keep their costs secret. Finally, it is clearly in the interest of shippers and business firms generally to know what the carriers' costs are for handling traffic between specific points. If this information is available, shippers have a weapon to beat down the freight rates on products for which rates are higher than the carriers' cost of service.

Publication of carriers' costs of providing specific services would assist shippers in undermining the "value of service" principle in rate-making as regards the products they ship. It is in the public interest that transport service be provided at low cost to shippers, but it does not follow that the elimination of the value of service principle is in the public





In conclusion, there is a need for statistics which measure and promote economic efficiency in the transportation industry. Comparable statistics of the varied services or outputs of different modes of transport should be publicly available. Although a business machine may be packaged differently and so weigh differently when sent by air or by water, a ton or a ton-mile of freight is roughly comparable for different carriers. Gaps in such statistics should be filled.

Secondly, cost information which can be related to functions or services should be available to the regulatory authorities so as to promote realistic rate-making and efficient transport. The carriers themselves seem to be increasingly cost-conscious in today's competitive environment, and this development tends to improve efficiency in transportation. Actual publication of carriers' costs for specific services, however, is a different matter. Publication of such information may damage the carriers financially through increasing pressures for rate reduction.

The third recommendation in regard to statistics relating to economic efficiency is that a substantial amount of information be publicly available on revenues collected or prices charged by the carriers for their services. The information should not be entombed in a book of rates, but should appear in regular statistical publications in tables showing movements of freight (volume, distance, region, and commodity) against revenue collected, and also in tables relating to revenues from special services.

Finally, some interpretation of the uses and limitations of data relating to carriers' output may increase the usefulness of the published statistics.



### Technical Efficiency

The variety of technical operations in movement of freight and passengers through and between terminals results in a corresponding variety of statistics of carriers' performance. Appropriate statistics must be designed in the case of railways for utilization of motive power, loading of freight and passenger trains, adherence to schedules, terminal handling, car allocation, consumption of fuel and materials, and utilization of manpower. For air operations, the statistics should relate to airports and aeroplanes and the special equipment and problems of the airlines. For water shipments, harbours and canals enter the picture. Each means of transport has its own special equipment and character, and accordingly its own statistical requirements.

Many of the statistics relating to technical efficiency are used for internal supervision of performance. These are not necessarily the statistics which the public requires. Analysts of the transportation industry will, however, derive useful information from statistics of performance. Measures of output, such as gross ton-miles, measures of utilization of equipment, such as the percentage of serviceable locomotive days to total locomotive days, and other measures of capacity and "inputs" will be useful not only to the carriers themselves but also to outsiders who wish to study the transportation industry.

### Forecasting Traffic

Statistics of carriers' output do not derive all their significance from the need to measure economic efficiency or technical efficiency. Detailed information about traffic, by commodities and areas, is of considerable use in market research.





Forecasts based on traffic statistics can detect developing trends in industry, and assist firms in predicting business conditions and potential sales.

Also, forecasts of traffic are useful in estimating future costs of carriers. Costs of transport are related to volume and location of traffic. Forecasts of demand for transportation service can assist carriers and regulatory authorities in realistic pricing of transportation services. New trends in transport service and the degree of public acceptance of such services as piggyback, fishyback, and containerized freight shipment can be studied if proper statistics are available. Both carriers and shippers will plan more effectively if data are available for forecasting and for appraising trends.

Although freight traffic has particular significance for the economy, the usefulness of studies of passenger traffic patterns should not be overlooked. Forecasts of passenger traffic trends are of value not only to airlines, railways, shipping companies, and bus companies, but also to the tourist and hotel industries. Published statistics of passenger traffic in adequate detail serve an important purpose.

#### Subsidies to Carriers

Pricing policies of carriers, traffic volume and composition, and carrier efficiency are all related to the financial condition of firms in the transportation industry. In practice, the financial position of many Canadian firms engaged in providing transport services has been improved through the payment of subsidies by the Government.

Because the public must pay both the freight charges and the subsidies, they have an interest in the publication of financial statements by the carriers. Financial statements, the next chapter



will show, are already available in considerable detail for rail and water carriers, but much less information is available for truck and water carriers. Also, the public has an interest in the amount and form of subsidies to transport firms. The most adequate information on subsidies is now available for rail carriers. Serious gaps exist in public information on subsidies to highway traffic, airlines, and pipelines. In some cases, the reason is that the element of subsidy is disguised or difficult to determine. In regard to highway traffic, there is a lively controversy on this continent concerning the extent to which commercial trucking pays through licence fees and other taxes for its share of the cost of building and maintaining highways. A clear answer to this question depends upon an analysis of the composition of traffic on particular highways. In Canada there is insufficient solid statistical fact to make possible an analysis of commercial trucking and other traffic in relation to highway costs.

Where direct subsidies are paid to the transportation industry, such information merits inclusion in the published statistics. Sometimes, as in the provision of airport, harbour, and canal facilities owned by the Government, the element of subsidy is uncertain or difficult to determine. Where subsidies are indirect, it is in the public interest to provide statistics which make possible estimates of these subsidies.

#### Accident Statistics

Another area of public concern is accidents related to transport. Highway accidents are of particular importance in view of their frequency and seriousness. Airline and rail accidents also arouse public concern. Therefore, it is useful to publish statistics of accidents in the transportation industry, with appropriate detail





concerning location and cause, and also statistics showing the cost of accidents. Present accident statistics are quite detailed, but give little information on the cost in terms of damage to persons and property. Another important part of the accident picture is the extent of government spending for the prevention of accidents and for safety measures.

### Labour Conditions

Public interest also focuses frequently on labour conditions in industry. The transportation industry is no exception. It is desirable to have detailed statistics of hours, wages, employment, and unemployment in the transportation industry.

Statistics of hours and wages, with information concerning paid holidays and overtime, should be published regularly for each region and means of transport. Furthermore, such information should be comparable with similar statistics for other industries, so that inter-industry comparisons will be possible. Such information should also be available historically, over a substantial period of time.

In a time of rapid technological change in the transport industry, information regarding the effects of such change on employment (and unemployment) in particular occupations is useful public information.

### Urban Economics

So far, the transportation industry may appear to be considered an inter-urban rather than an urban industry. There is, however, no intention to omit accidents on city streets or labour conditions in urban transit companies from the category of useful transportation statistics. In addition, urban transportation is not



only a significant industry in itself, but also is in some cases hardly separable from inter-urban transportation. Railways provide commuter services in large metropolitan areas, and so do inter-urban bus companies. Local cartage companies provide not only urban transport but also services which are tied in with inter-urban movements of rail freight. Taxicabs offer mainly an urban service, but will also carry passengers between cities as well. For a complete picture of the transportation industry, it is necessary to have statistics of urban transport as well as of inter-urban transport.

In addition, statistics should be available to permit studies of the role of transportation in the economy of the large municipality. Traffic problems grow in seriousness with the growth in large agglomerations of population. Solutions to problems of urban congestion can be found only through a thorough understanding of the economics of urban transportation. Alternatives to expensive road construction programmes may be found in improved railway and bus commuter services, or subsidized extensions of mass transit facilities. Analysis of such problems and alternative courses of action depends upon the availability of adequate statistics of urban transportation. The kinds of statistics needed relate both to traffic patterns of public and private vehicles, costs and revenues of urban transit companies, and public expenditures on roads.

#### National Defence

Up to this point, only peacetime uses of transportation statistics have been considered. In wartime, comprehensive planning of transport movements to take account of war priorities





demands adequate statistics of traffic and equipment for each means of transport. In a future war or defence emergency, electronic data processing might well secure a more efficient utilization of the nation's transportation capacity. Past statistics of inputs (plant, labour, and materials) could be related to output detail so as to calculate production functions for the transport industry. Resulting input-output tables could be of great assistance in programming traffic for maximum results in an emergency. The necessary statistical base cannot be worked up in an instant. Extension of our peacetime statistics, further analysis of traffic patterns and costs, and applications of new data-processing techniques to secure fast results will all improve our chances of effective mobilization of transport resources in a sudden national emergency.

#### Timeliness and Historical Continuity

In all statistics for whatever use, an important consideration is timeliness of the information when it is published. If statistics of transportation covering 1960 are not available until 1962, much of their usefulness may be destroyed. On the other hand, a rush to publish statistics without time for checking accuracy or securing delinquent reports may result in inaccurate information. Or fast publication may be secured at excessive cost. The importance of fast availability of statistics varies according to the use made of them. For forecasting traffic or economic trends, prompt availability of information is of considerable importance. For analysis of situations which change slowly, immediate accessibility to data has less importance. The statistics should be timed so as to meet the important needs within a reasonable time. Sometimes the provision of monthly or weekly data in less detail improves the timeliness. In other cases, detailed annual data may be significant even if not available promptly at the end of the year, whereas general data published monthly may not meet a real need.



Through inquiries for information and comments on existing publications, the Dominion Bureau of Statistics gathers an impression of the importance of timeliness in publication of particular statistical series.

A further important dimension in statistical services is the element of historical continuity. For some purposes, availability of a historical series is not important. In other cases, the absence of a continuous time series renders fruitful analysis impossible.

Historical analysis of statistics of traffic, finances of carriers, labour employed, and price of services is likely to be sufficiently common and important to warrant an effort to preserve continuous time series.

Sometimes it is difficult to preserve genuine continuity in a statistical series over a long period of time. A locomotive today is not the same as a locomotive ten years ago either in appearance, consumption of fuel, or performance. Accordingly, a locomotive-mile or even a train-mile today is not quite the same thing as it was in 1950. A long historical series of train-mile statistics may look homogeneous, but it is not. Technological change has interfered. Likewise, commodities change as time goes on, and today's automobile is not quite the same product than an automobile was in 1940. Also completely new products are added. New types of equipment and plant can introduce hidden discontinuities into statistical series. A huge investment in hump yards or diesel locomotives can result in a sharp decline in labour cost of yard switching or hauling a ton of freight, and the historical series of labour cost is misleading unless related to depreciation costs of yards and locomotives over the same period of time. For all these reasons, historical continuity cannot be guaranteed.





At the same time, if the basis of a statistical series is changed to make it more accurate or useful in a modern context, it is usually possible to preserve historical continuity through continuing the series for a while on the old basis. Discrepancies then show up. Difficulties arise when the basis of a statistical series is shifted, but no bridge is provided between the old and new series.

Usefulness of statistical information is therefore dependent frequently upon the speed with which it becomes available, and upon the possibility of comparisons with past years. This aspect of present transportation statistics will be considered in the appraisal of existing statistics in the next chapter.

#### Appraising the Usefulness of Statistics

Many of the uses of transportation statistics have been described in this chapter. Other uses exist, undoubtedly, which have not found a place in this description. Not all uses which statistics come to serve can be easily foreseen either. Sufficient has been said, however, about the needs which transport statistics serve to provide some criteria for judging existing statistics.

How do we decide then whether a given statistical series (present or proposed) is useful or not? Is not usefulness largely a matter of opinion? It is certainly true that there are difficulties in deciding when a statistical series meets a real need. Some experienced statisticians have found that the best way to get an answer is to quietly stop publication of a series. If no one complains, the statistics are useless and can safely be discontinued. If there are loud complaints, the statistician simply resumes publication and apologizes for the delay!

The method suggested is a little crude. It yields no information about the reason for a statistical series not being needed. It tells nothing about whether the statistics arrived too late to be useful, or whether they were too complicated, or poorly



presented, or simply irrelevant to any need.

Logic will carry us only part way in deciding whether a given statistical series meets a need. Some statistics may be so inaccurate as to appear useless, but even so there are situations in which businessmen make accurate decisions using imperfect information. The statistics may appear inadequate and yet be better than nothing. Then there are many border line cases where a series might be useful, but where nothing is really known about its actual use. The number of paid subscriptions to a statistical publication is some indication of usefulness, but some organizations and libraries subscribe to all government publications in the interest of having complete files. The publications may not all be actually used. Then too, a small number of subscribers may actually make highly significant use of a publication. A trade association may use one copy of a government publication as a basis for a valuable piece of analysis distributed to 1000 members. Or a university professor may use some obscure statistical series in writing a useful book.

The next chapter begins with an appraisal of present transportation statistics using another method - a questionnaire to a sample of industrial firms which may be expected to have a use for transportation statistics.

Up to this point, we have described a number of needs for transportation statistics and have outlined kinds of information which could usefully be published. Among the uses for such statistics is the integration of transport cost and traffic data with information about other steps in the production of goods and services. Information on the pricing of transport services was also found to serve a presumed need. Statistical measures of output, of economic efficiency and





technical efficiency should also be of value. Financial reports of carriers, and statements of government subsidy should be published. Finally, the special needs of defence planning should be taken into account through development of advanced statistics of transportation inputs and outputs. In most instances, there is a need for comparable information for all the many different modes of transport. This is a complex industry, affecting every region of the country, and therefore an almost bewildering variety and detail of transport statistics appear to be needed. In terms of the outline of uses here developed, we shall now analyze the existing published statistics with particular attention to important gaps and ways of filling them.



## CHAPTER 2

### ASSESSMENT OF EXISTING STATISTICS OF TRANSPORTATION

#### Questionnaire to Traffic Officials

In July 1960 a questionnaire went to 25 traffic officers employed mainly by large manufacturing firms to ask them "How useful are the Federal Government's transport statistics to you?" The questionnaire is reproduced and the 23 replies are summarized in Table 1.<sup>1/</sup> Questions in this questionnaire asked about the usefulness of existing statistics of transportation and also about the value of several suggestions for new statistical series.

Replies indicated a greater demand for statistics published by the Dominion Bureau of Statistics on rail and truck transportation than for those dealing with other means of transport. Eight replies classed rail statistics as "very useful" and seven replies placed truck statistics in the same category. Only one respondent classed pipeline or urban transit statistics as "very useful" and four considered them of no use. Of course, it might be anticipated that industrial traffic officials would have less reason to use urban transit statistics than statistics of intercity transport. One question

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<sup>1/</sup> Replies were received from the following organizations: Aluminum Company of Canada, Limited; Bathurst Power & Paper Company Limited; The British American Oil Company Limited; Canada Cement Company, Limited; Canadian Cannery Limited; Canadian Gypsum Co. Ltd.; Canadian Industrial Traffic League; Canadian Industries Limited; Crown Zellerbach Canada Limited; Duplate Canada Limited; DuPont of Canada Limited; Federated Co-operatives Limited; The Glidden Company Limited; Hiram Walker & Sons Limited; Husky Oil & Refining Ltd.; Kraft Foods Limited; Lever Brothers Limited; Manitoba Transportation Commission; Northern Electric Company Limited; Robin Hood Flour Mills Limited; Standard Brands Limited; Swift Canadian Co., Limited; Union Carbide Canada Limited.





## QUESTIONNAIRE, WITH SUMMARY OF REPLIES FROM 23 ORGANIZATIONS

How useful are the Federal Government's transport statistics to you?

1. Do you subscribe to any of the transportation statistics published by D.B.S.? No: 6 replies

|               | <u>Very useful</u> | <u>Occasional use</u> | <u>No use</u> |
|---------------|--------------------|-----------------------|---------------|
| Truck         | [7]                | [4]                   | [2]           |
| Rail          | [8]                | [3]                   | [2]           |
| Air           | [3]                | [4]                   | [3]           |
| Water         | [3]                | [4]                   | [2]           |
| Canal         | [3]                | [5]                   | [2]           |
| Pipeline      | [1]                | [5]                   | [4]           |
| Urban transit | [1]                | [2]                   | [4]           |

2. Do you use the annual rail Carload Waybill Analysis published by the Board of Transport Commissioners? If so, is it:

Not used: 5 replies.

Useful in detail [6]; Useful in its totals [4]; Little use [6]

3. Do you subscribe to all publications of the Dominion Bureau of Statistics in all fields? Yes 3 No 19

4. How many of your employees are engaged in reporting information to the Dominion Bureau of Statistics? None: 6 replies.

Full time 1; Part time 56 (Totals reported by all respondents)

5. Do you develop from your own company records traffic and transport statistics for your own use? Yes: 16; No: 5.

Please give details:

6. Would any of the following statistical services (if made available by the Federal Government) meet a need in your company? None: 5 replies.

(a) Truck carloading figures similar to rail carloadings already published [8]

(b) Volume of traffic by main commodity and origin and destination for:

Rail [11]; Truck [11]; Air [4]; Water [9]

(c) Cost to carriers of handling shipments between specific points by:

Rail [16]; Truck [7]; Air [6]; Water [14]; Pipeline [8]

(d) Index of freight rates:

Rail [13]; Truck [13]; Air [7]; Water [11]; Pipeline [6]

(e) Piggyback and fishyback traffic analysis [10]

(f) Containerized traffic analysis [12]

(g) Statistics by teletype [1]

(h) Present statistics published sooner [9]



dealt specifically with the annual Waybill Analysis: Carload All-Rail Traffic, a publication of the Board of Transport Commissioners containing statistics of tons, ton-miles, average haul and revenues classed according to commodity and type of freight rate. (See Exhibits 16 and 17 in the Appendix). Six of the 23 respondents found the detail in this publication useful, although it is based on a small sample (1%) of domestic carload traffic. Four found the more general or total statistics useful, six considered the publication of little use, and five did not use it at all. (Two other respondents did not answer this question. Broadly speaking, the replies to questions concerning existing statistics indicated that truck and rail statistics (including the Waybill Analysis) are very useful and that at least a quarter of the traffic officials polled make "occasional" or more frequent use of the statistics in all categories of intercity transport.

A large majority of the firms sampled also prepare their own internal statistics of transportation. The nature of internal statistics varies from firm to firm. A number of companies prepare detailed statistics of freight loaded and unloaded, or shipped by each mode of transport. Tonnages shipped to warehouses and distribution points are commonly recorded. Some firms record loss and damage claims or demurrage charges or cost of local cartage services utilized. The need for internal statistics of these types could never be met by published statistics which are not intended to reveal the operations of individual industrial firms.

None of the respondents actually complained about the burden of reporting information to the Dominion Bureau of Statistics. Provided the replies are comprehensive, a total of one full-time employee and 56 part-time employees were engaged in reporting statistics for 23



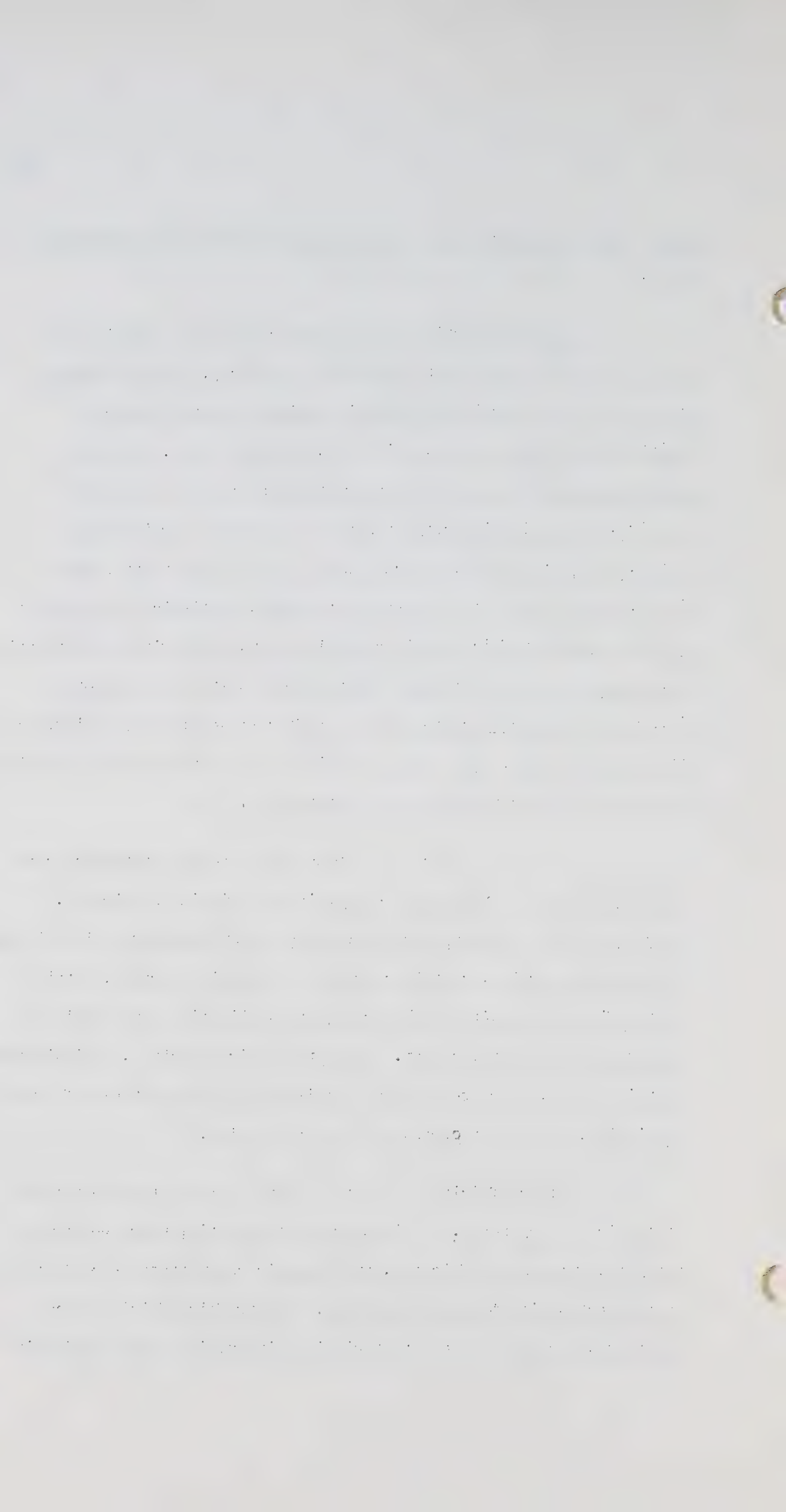


firms. These numbers do not appear excessive - fewer than three per firm.

A large proportion of the traffic officials replying supported a need for additional statistical services. Greatest demand was for "cost to carriers of handling shipments between specific points" truck (17 replies), rail (16), and water (14). There was also a substantial demand for information on pricing of transport service; 13 replies indicated a need for an index of rail freight rates, 13 for an index of trucking rates, and 11 for a water rates index. Nearly half of the respondents wanted statistics on volume of rail and truck traffic by main commodities and by origin and destination. Also there was support for more data on some of the new developments in freight traffic -- containerized traffic (12 replies) and piggyback and fishyback (10). More than one-third of the replies showed a desire for earlier publication of present statistics.

All of these precise questions about needed statistics cover information not now published -- gaps in the existing statistics. There is clearly a demand for information to fill these gaps in pricing of transport service, cost to carriers of providing service, details of traffic by commodity and by origin and destination, and detail of new types of freight movement. Amongst traffic officials, as indicated by this sample, there seems to be a fair degree of acceptance of present statistics, but also a demand for some new series.

Traffic officials are not the only users of transportation statistics by any means. A wider group of potential users -- market analysts, government officials, and economic consultants -- could also be approached with the same questions. The traffic officials were questioned because they are a specialized industrial group working in



transportation. Their interest in transport statistics, and therefore their probable response to the questionnaire, was judged to be greater than that of a more diverse group.

#### Coverage of Transport Periodicals

Several types of government publications may contain information on transportation. Some periodicals specialize in transport statistics. Such publications may be annual, like Railway Freight Traffic, or monthly, or even more frequent, like Carloadings, which the Dominion Bureau of Statistics issues four times a month. Most of the government periodicals dealing entirely or chiefly with transportation are produced by the Dominion Bureau of Statistics, but one notable exception is the annual Waybill Analysis: Carload All-Rail Traffic issued by the Board of Transport Commissioners. The specialized statistical publications almost always deal with a single mode of transport, and few with more than one except, for example, where truck operations of major railways are included in rail reports. Two exceptions, publications dealing with several modes of transport, are the periodicals Travel between Canada and the United States (monthly) and Travel between Canada and Other Countries (annual). Apart from these few examples there are no publications which successfully tie together the various means of transport. Existing statistics do not integrate the parts of the whole transportation industry, in large measure because statistical series published for the different means of transport are not comparable.

Included among the special publications on transportation for our purpose, are periodicals dealing with warehousing and storage, and with production of transportation equipment. Warehousing and storage are closely linked to transport in actual practice. There is also a close relation between industrial inventories and transportation service.





And production of transport equipment -- whether railway rolling stock or boats or bicycles -- is important in the relationships between transport and the rest of the economy.

In addition to publications dealing specifically with transportation, there are many which deal only incidentally with transport. For example, the annual Grain Trade of Canada prepared by the Dominion Bureau of Statistics contains information on water and rail freight rates, on movements by water, rail and truck to grain elevators, and on quantities of grain stored in elevators. So much information relating to transportation and particularly storage is contained in the periodicals which deal chiefly with grain that these are listed in this study among publications in the Warehouse and Storage category.

The statistical content of all the publications dealing mainly or substantially with transportation is summarized in the Appendix, and exhibits representing exact reproductions of tables in these periodicals illustrate the form of presentation.

#### Annual Reports of Government Agencies

Also annual reports of some government departments contain statistics of transport in the form of distinctive series -- not just a rehash of the ordinary statistical publications. An important example of this is the Annual Report of the National Harbours Board containing important statistics of traffic inbound and outbound from ports under the Board's jurisdiction. The Annual Report of Board of Transport Commissioners for Canada contains very detailed information on expenditures for protection at highway crossings and also detail of grade separations approved and contributions from the Railway Grade Crossing fund for automatic protection and improvements to view. For this and certain other information the Board's annual report is a source of



detailed statistics not found in the regular periodicals of the Dominion Bureau of Statistics.

Another important report is the Annual Report of the Canadian Maritime Commission, containing material on ships in the Canadian merchant fleet, and charter rates. Statistics of Canadian-flag participation in carriage of Canada's overseas trade are included and also information on operations of Canadian shipyards.

The Board of Grain Commissioners also publishes a number of statistical tables based on reports received from all elevators licensed under the Canada Grain Act. Useful information on transport may appear incidentally in other reports of government agencies -- such as details of subventions on coal paid under the Maritime Freight Rates Act. Then too, there are included in annual reports of government agencies financial statements of government bodies dealing with transportation -- The Department of Transport, the Board of Transport Commissioners, the St. Lawrence Seaway Authority, and the National Harbours Board. Amongst government agencies we may include the Canadian National Railways. Actually the Canadian National and Canadian Pacific both include statistical sections as well as financial data (balance sheets and income statements) in their annual reports. Annual and historical statistics of rail-line operations include much material found also in the Dominion Bureau of Statistics publications on traffic and revenues and expenses. A few statistics such as average speed of freight trains appear only in the annual reports of the two major railways.

The annual reports of government agencies are for the most part though only an incidental source of information on Canadian transportation. Main reliance must be placed on the specialized statistical





series published regularly by the statistical agencies of the government, chiefly the Dominion Bureau of Statistics. Accordingly this report does not make any recommendation about the statistical content of annual reports of government agencies. It is considered that all important data should be provided in the regular statistical periodicals, whether or not there is some duplication with the departmental reports. Only the Annual Report of the National Harbours Board is described in the Appendix (and Exhibit 47). Material on National Harbours Board ports might well be extended to include other ports as well and appear in the regular Dominion Bureau of Statistics reports dealing with water transportation. And some of the information on charter rates from the report of the Canadian Maritime Commission might also usefully make its way into regular specialized transport publications.

#### Relation of Transport to the Rest of the Economy

In addition to the specialized reports on transport and the annual reports of government agencies which serve more than just a statistical purpose, there is considerable useful information on transportation in Dominion Bureau of Statistics and other government publications which deal either generally with the whole economy, or mainly with some other subject -- with only incidental reference to transportation. These publications are significant in that they relate transportation to the rest of the economy.

One example is Taxation Statistics, published annually by the Department of National Revenue. Not primarily concerned with transportation this publication shows financial data on taxable companies in the categories of railways, urban transportation and taxicabs, bus and other transportation, grain elevators, and storage and warehouse. The airlines may not like being lumped in with "Bus and other transportation",



but on the whole the information in the publication is useful in relating taxable transport companies with corporations in other industries.

A number of publications dealing with employment contain incidental references to transportation, or some transportation category in the tables of statistics. A monthly employment index for transportation and for each of the important modes of transport appears in a monthly publication of the Dominion Bureau of Statistics, Employment and Payrolls. The same publication also states the average weekly wages and salaries and the number of employees reported in each of these categories. The information is provided in regional detail as well -- by provinces and selected urban areas.

Information on average weekly hours, average hourly earnings, and average weekly wages appears in the Dominion Bureau of Statistics monthly and annual periodicals, Man-Hours and Hourly Earnings. Employees in "transportation equipment" and "electric and motor transportation" are covered here. Hirings and separations in transportation, storage, and the transportation equipment industries are reported in the semi-annual publication, Hiring and Separation Rates in Certain Industries. This is not a comprehensive list of transport data in publications dealing chiefly with labour and employment. Most of the Dominion Bureau of Statistics' publications on labour and employment contain a transport category. There are some gaps though. It is recommended that in the Man-Hours publication railways, trucks and shipping be included. Employees in each of these categories should be shown separately, along with employees in transportation equipment and electric and motor transportation, who are already covered.





Statistical publications dealing with prices contain monthly consumer price indexes for: transportation; automobile operation; new passenger cars; gasoline; local transportation; and street car and bus fares. Price indexes for freight rates are a noteworthy omission from the Prices & Price Indexes publication.

Also the annual National Accounts publication includes information on transport subsidies by the federal government, provincial taxes on gasoline and motor vehicles, and on the contribution of transportation and storage to the Gross Domestic Product at factor cost, to corporation profits, and to other national aggregates.

Transportation is also included -- in the categories "transportation, storage, and trade" and "transportation equipment" in the input-output table in the Dominion Bureau of Statistics' study of the inter-industry flow of goods and services, 1949. It would be worthwhile to include specific information eventually on transport alone and even individual modes of transport in such input-output studies of the whole economy.

Finally, transportation data are included in a number of publications used by people who are not specialists in transportation at all. General users of statistical information, or specialists in fields other than transport, may often find the degree of detail in the chapter on transportation in the Canada Year Book of Canada 1959 sufficient for their purpose. Material on transport in these publications and in the monthly Canadian Statistical Review is usually similar to that available in greater detail and sooner in the specialized transport publications. On the other hand, information in the Dominion Bureau of Statistics Daily Bulletin may draw the attention of any user of this service to a specialized publication on transport



which has just been issued that day, and give him a summary of the statistics as well. Also, in the May 17, 1960 issue, Dominion Bureau of Statistics published for the first estimates of intercity ton-miles by each mode of transport, as well as a percentage distribution, with separate series for the years 1938 to 1958 for rail, road, water, air and oil pipeline. While not a specialized publication, the Daily Bulletin may from time to time prove useful to any user of transport statistics.

#### Summary of Coverage in Specialized Transport Periodicals

Enough has been said to indicate the great volume of statistical data published with reference to transportation in a variety of publications. At this point it is desirable to say more about the exact nature of the transport statistics now being published. It will then be possible to work toward more precise recommendations for improvement once the gaps and weaknesses in present statistics are more clearly defined. We will deal specifically only with the specialized publications on transport. That is where improvement must start.

A broad summary of the coverage of the specialized publications on transport (including all the publications described in the Appendix) is presented in Chart 1. Classification of statistical data for use in Chart 1 is by (1) mode of transport and (2) by subject or function with which statistics may deal.<sup>1/</sup> The chart shows the extent of coverage -- considerable detail; incomplete coverage; smattering of data; or no data at all. Areas in which statistical material is now

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<sup>1/</sup> Judgments concerning the extent of coverage in each square in the chart were based on a detailed description of the statistical material available under each subject for each means of transport. This detailed material is not reproduced in this report, but is included in the working papers in the files of the Royal Commission on Transportation.





CHART 1

SUMMARY OF COVERAGE IN TRANSPORTATION PERIODICALS

CHART 1

| Subject or Function                         |  | RAIL      |         |          |                 | ROAD      |                        |               | URBAN   | WATER     |                       |           | Air | Pipe-Line | Ware-house & Storage |
|---|--|-----------|---------|----------|-----------------|-----------|------------------------|---------------|---------|-----------|-----------------------|-----------|-----|-----------|----------------------|
|   |  | Rail-ways | Bridges | Ex-press | Commu-nica-tion | Truck-ing | Inter-City & Rural Bus | Motor Vehicle | TRANSIT | Shipp-ing | Canals, St. Lawr-ence | Har-bours |     |           |                      |
| TRAFFIC (OUTPUT):                           |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 1. Total Volume & Distance                  |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 2. Volume & Distance by Commodities         |  |           |         | N.A.     | N.A.            |           | N.A.                   | N.A.          | N.A.    |           |                       |           |     |           |                      |
| 3. Frequency & Speed of Service             |  |           |         |          |                 |           |                        | N.A.          |         |           |                       |           |     |           |                      |
| PRICING OF OUTPUT:                          |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 1. Freight Rates                            |  |           |         | N.A.     | N.A.            |           |                        |               | N.A.    |           |                       |           |     |           |                      |
| 2. Passenger Rates                          |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 3. Storage Charges                          |  |           |         |          | N.A.            |           |                        |               |         |           |                       |           |     |           |                      |
| INPUTS (and pricing of Inputs):             |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 1. Plant & Equipment Inventor               |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 2. Materials and Fuel Consumption           |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 3. Labour & Wages                           |  |           |         |          |                 |           |                        | N.A.          |         |           |                       |           |     |           |                      |
| FINANCES OF CARRIERS                        |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| Balance Sheet & Income Statement            |  |           |         |          |                 |           |                        | N.A.          |         |           |                       |           |     |           |                      |
| 2. Taxation                                 |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 3. Government Aid & Subsidy                 |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| Government Regulations                      |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| ACCIDENTS:                                  |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 1. Number & Cost                            |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |
| 2. Safety Measures & Expense for Prevention |  |           |         |          |                 |           |                        |               |         |           |                       |           |     |           |                      |

KEY

CONSIDERABLE DETAIL

INCOMPLETE OR PARTIAL COVERAGE

SMATTERING OF DATA

NO DATA

NOT APPLICABLE





concentrated become apparent from the chart and it is then possible to appraise the significance of the gaps.

The subjects in the left-hand column of Chart 1 relate to aspects of transport operations and financing concerning which there might be a need for public information. The analysis in Chapter 1 demonstrated a need for statistics dealing with pricing of carriers' outputs -- freight rates, passenger fares and storage charges. Replies to questionnaires supported a need for an index of freight rates. Also there was a demand for statistics dealing with the amount of output (traffic) of carriers. The replies to questionnaires supported a need for statistics of traffic by commodity and by origin and destination. Statistics measuring economic efficiency in Chart 1 usually fall under the heading of traffic -- total volume -- because they combine certain cost information (or sometimes carriers' revenue) with measures of output, for example "freight train revenue per train mile". Statistics relating to technical efficiency are not classed separately, but are included in the output or "total volume and distance" category. The classification in Chart 1 is not related explicitly to use but rather to the nature of the subject matter of the statistics. Uses may not always be ascertainable objectively, whereas subject matter of a statistical series is more precisely definable. So the classification emphasizes certain aspects of transport. One aspect is output or traffic (volume, distance, speed) and the commodity data necessary for integrating these with data for other industries. One distinct subject is the pricing of outputs (rates). Another aspect is inputs -- the inventory of plant and equipment, materials and fuel, and labour necessary for producing transportation service. Then there is the financial aspect. It may sometimes be difficult to integrate the financial data with input and output data, but they form



part of a single piece -- the fabric of transport service in Canada. Government regulations and accidents are additional aspects of transport service. Regulations may entail cost, and so may safety measures, and in this way these features of transport service tie into the same piece of material. So the subject classes are broadly related to different uses that may be made of statistics, but subjects and uses, while reconcilable, are not identical. It is not necessary that all of the classes fit together. Each class of statistical material has distinct uses of its own regardless of any need for bringing all series together. A good program of statistics is concerned with maximum usefulness of the statistics in each class as well as an adequate coverage and coordination of all classes of published transport data. The classes in Chart 1 do not cover every subject, nor relate to every use. But they do serve to categorize the statistical series available, and an appraisal of their usefulness readily follows.

We can see from Chart 1 that more detailed statistics are available for rail and truck than for other means of transport. Particularly great detail is provided for rail transport. Even for rail, though there are gaps. One is the complete absence of information on government regulations though there is much detail on this subject for trucks. A smattering of data is published on frequency and speed of rail service (none on frequency actually). And existing information on freight rates and passenger fares and on materials and fuel consumption is judged to be incomplete or to cover the subject only partially. On trucking, information on traffic by commodities provides only partial coverage, and there is nothing on storage charges of commercial trucking firms or on frequency and speed of service.





Urban transit is only partially covered by current statistics, except where accidents are concerned. Statistical reporting on the minor carriers, like express or ferries and bridges or canals, is spotty. The most noticeable gaps are: (1) nothing on air traffic by commodities; (2) very little on volume of goods stored -- most of it is on grain; (3) nothing on air, pipeline, or warehouse rates, while water rate information is confined to grain; (3) nothing at all on government subsidies to water, air, pipeline, warehousing, and only a smattering on subsidies to urban transit; (4) coverage of airline statistics is only partial on a number of subjects -- inputs of plant and equipment inventory, materials and fuel consumption, and labour. Gaps in bridges, tunnels and ferries, in express and in railway communications are possibly not of great importance. More data on harbours and canals, however, might be useful.

Judgment of these matters however, must await a more detailed consideration of the contents of the statistical series represented by the squares in Chart 1. The content of each statistical periodical is described separately in a catalogue in the Appendix, illustrated by exhibits. The publications appear in this catalogue according to the type of transport to which they refer -- rail, road, urban transit, water, air, pipeline, warehouse and storage, or transportation equipment. In the text of the report, however, we shall follow the order implied in Chart 1. The statistical series, without much detailed reference to the periodical in which they are found, will be classed according to carrier and subject, and the adequacy of statistics in each of these classes will be appraised.

#### Traffic: Volume, Speed and Distance

The large amount of data published on total volume of traffic for each of the major carriers is indicated by Chart 1. Such statistics relate to volume, distance, and speed or frequency of service. "Tons"



and "carloads" measure volume, "average haul" measures distance, "ton-miles" or "car-miles" combine measures of volume and distance. Statistics regarding frequency of service seem to be non-existent, and there are no data at all on the speed of service, except in terms of average speed of railway freight trains (in miles per hour) and "on-time performance" of passenger trains. Since terminal handling can be a time-consuming factor in freight movement, it might be advisable to sample the time between actual loading of freight at origin and actual unloading and destination, or alternatively between making out bill of lading and notification of arrival of freight at destination. Volume, speed, and distance are the main aspects of transport output -- but special services such as refrigeration, milling-in-transit, assistance in loading and unloading are also part of the transport service. The special service features vary markedly from carrier to carrier, and there is little indication of the extent of such services in the published statistics of traffic. Traffic statistics serve a wide variety of uses in measurement of economic efficiency of transport, in forecasting traffic, sales business conditions and in calculating carriers' costs.

Another important feature of traffic statistics is the possibility of analysis by commodity and by region. Without this type of breakdown, it is difficult to relate the data to specific industries or areas of the country. In some ways, each region of the country has its own distinct economic problems which entitle it to be treated as an economic entity. Analysis of many questions of regional economic policy -- Dominion-Provincial relations, for example, -- demand availability of regional data. And transport is frequently an important issue in regional economic analysis. Significant regional data are available through statistics of traffic, and where there are important omissions





in this respect, they will be noted. Gaps in commodity data are of sufficient importance, however, to warrant a separate line for "Traffic by Commodities" in Chart 1. For all major intercity transport, statistics of volume of output are published in considerable detail.

Information on railway carloadings is available four times monthly (see Exhibit 1) with a breakdown for 47 commodities and less than carload traffic. The regional breakdown is very broad -- eastern and western divisions of the country -- and therefore not particularly useful. There is no corresponding information on truckloadings. Such statistics would be of value because the two together would provide a useful economic barometer, available in print, one would hope, shortly after the close of each period. On a monthly basis, more detail of traffic is available for all carriers, and the greatest detail of all is available annually, though often many months after the close of the year.

For rail traffic, tons of freight appear in the monthly issue of Railway Freight Traffic, published by the Dominion Bureau of Statistics. The commodity classification used is that of the Association of American Railroads, and so does not coincide with that used by the Dominion Bureau of Statistics for other statistical series, such as international trade. The same information is available also in the annual issue. Tons originated and terminated are shown (see Exhibit 10), but there is no link between origin of a shipment and its destination, which greatly limits the usefulness of the series. Additional limitations are the fact that imports by water are not separated from rail shipments originating at Canadian stations, and that exports by water are included with other traffic terminating at Canadian stations. No clear separation of domestic and international shipments is possible. These same limitations



apply in the annual publication, Railway Transport, Part V: Freight Carried by Principal Commodity Classes, which gives similar information for each of 22 Canadian railways.

The annual Waybill Analysis, Carload All-Rail Traffic, published by the Board of Transport Commissioners, also utilizes the commodity classification of the Association of American Railroads. But there are more data included than merely tons of freight. Number of carloads, revenue tons, ton-miles, car-miles, and average haul are all measures of railway output recorded by commodity in this publication. These data are supplemented by statistics of average revenue per ton-mile, a rough measure of pricing of output, and by information on type of rates (see Exhibit 17). The regional breakdown is quite broad. Traffic originating and terminating in eastern, western, and maritime regions is shown separately, but again statistical tables suffer from the weakness of no link between origin and destination of shipments. Furthermore, the fact that the basis of the data is a 1% sample of carload waybills renders the data unreliable, particularly in details. The degree of accuracy was, however, sufficient apparently to warrant 6 of 23 respondents to the questionnaire (Table 1) reporting that the publication was useful to them "in detail".

Other limitations of the Waybill Analysis include the omission of traffic over the American border and the omission of less than carload traffic (attempted only once by the Board and then dropped because of the labour involved). Also, the publication gives no indication of mixed-media traffic, such as combined lake and rail movements. It would be particularly helpful to have traffic data which could be related to exports and imports. And availability of mixed-media traffic data (lack of which is one important general criticism of present transport statistics) would assist in the promotion of through routing and



coordination among all modes of transportation. Appropriate combinations of media can promote economic efficiency in transport.<sup>1/</sup>

Nowhere in present traffic statistics is there an analysis of piggyback traffic (now stated in total without commodity breakdown) fishyback traffic, or containerized freight. Statistics relating to joint movements by rail and truck, or rail and water, and specifically relating to these new developments in freight service, would be quite advantageous, as is indicated by the replies to the questionnaire.

In addition to the published tonnage and ton-mile statistics by commodity, there is a variety of other information on rail traffic for which there is no commodity breakdown. Gross ton-miles, car-miles, train-miles, locomotive-miles, passenger-miles, are published in various forms annually and monthly in Railway Operating Statistics. Also, the publication contains a variety of averages -- measures of revenue per unit of traffic (per freight train-mile or per ton-mile, for example), and measures of operating performance such as average ton-miles per loaded car-mile. Such information is shown separately for the Canadian National Railways, Canadian Pacific Railway, and the total of 22 Canadian railways. (see Exhibits 12 and 13). Similar information for each of the 22 railways appears in Railway Transport, Parts I and IV (see Exhibits 5 and 9). Properly used, many of these averages are indicators of technical efficiency or economic efficiency of railways. Yet the statistics of this type require considerable

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<sup>1/</sup> A study of American transportation policy by the U.S. Department of Commerce, Federal Transportation Policy and Program, (March 1960) recommends encouragement of through routes and joint rates between several forms of transport -- p. 8.





intelligent interpretation before they can be used for that purpose. More interpretation of the limitations and uses of these statistics might be profitably included in the text at the front of these publications.

Measures of output of other phases of rail operation are contained in separate publications which deal respectively with express, communications, and also with bridges, tunnels and ferries. The express publication tells nothing of importance about the quantity of express traffic -- only the value of financial paper issued (see Exhibit 18). Express car-miles in freight and passenger service by type of motive power, and in work train service appear in Railway Transport, Part IV (Exhibit 9), but not in the publication Express Statistics. This latter publication could be made more comprehensive by the addition of statistics of volume of express traffic. The statistics of output of telegraph and cable companies are more adequate, containing detail of telegrams sent and received, cablegrams sent and received, and money transfers. Traffic over bridges, through tunnels, and on ferries, with totals for each category is counted in terms of passengers, trucks, buses, motorcycles, and so on.

#### Traffic by Commodities

The main gap in statistics of truck traffic is the paucity of commodity data. Commodity data are limited to six broad categories -- agricultural; animal; mine; forest products; manufactures and miscellaneous; and N.O.S. general freight. Only traffic by for-hire trucks is recorded. The substantial category of private trucking is omitted from the commodity breakdown, and so are urban trucks. Commodity totals are given by province of registration (Atlantic provinces grouped together), separately for international and interprovincial class, and intraprovincial intercity class of traffic (see Exhibit 25 for commodities in each class). A much more detailed commodity classification preferably



the Standard Commodity Classification used by the Dominion Bureau of Statistics, would greatly improve the value of the data. The inclusion of a breakdown by commodities for private trucks and urban truck movements, would also be most useful. Also traffic flows of each commodity by origin and destination would be valuable information.

The most useful material on truck traffic is included in the annual publication Motor Transport Traffic, with seven separate volumes for national estimates and for provincial (see Exhibit 21 to 26). No data are published monthly on truck traffic at all. The other main source of trucking information is an older series, Motor Carriers--Freight (see Exhibits 19 and 20), which contains financial, traffic, equipment, and other statistics for each of four classes of carrier, depending upon size, with least detail for the smallest firms. The trucking statistics all somehow give an impression of unnecessary complexity. The inclusion of different amounts of data for different classes does not make for quick comprehension of the statistics. In the Motor Transport Traffic publication, the numerous classifications of truck according to interprovincial and international, intraprovincial, intercity, private, for-hire, farm trucks, urban trucks, and vehicle weight groups make each publication a maze to the uninitiated. The fault may be in the presentation, but in any event the statistics are frighteningly complicated at first glance.

Just as the truck statistics are deficient in commodity breakdown, so the air cargo (freight and express) statistics would benefit from an extension in this direction. There are no commodity data at all for air cargo, which is an area of great potential in North America in years to come. A study of air cargo by Boeing Airplane Company predicted that domestic air cargo traffic in the United States,





would rise from about 470 million ton-miles in 1957 to 2 billion ton-miles in 1965 and 5,500 million in 1970. The trend in world air cargo traffic is similar. Between 1946 and 1957, world air cargo traffic expanded over 20% annually.<sup>1/</sup> The time to begin gathering statistical series is not after a marked growth has occurred, but before it occurs. Statistics of air cargo by commodity, and origin and destination would be of growing use. Such statistics would be useful addition to the Dominion Bureau of Statistics publication, Civil Aviation.

In regard to water traffic, tons by commodity are now available but not ton-miles. In fact, aggregate estimates of ton-miles by water have only recently become available. The monthly publication, Shipping Statistics, shows some commodity tonnages for coastwise shipping and foreign shipping, and the annual Shipping Report contains such data in considerable detail (see Exhibits 37 to 40). Weaknesses of these data are (1) the fact that in coastwise shipping the amount loaded frequently does not correspond with the amount unloaded; (2) absence of ton-miles, or data linking origin and destination; and (3) the large size of the "general cargo" category. In coastwise traffic, more accurate statistics of cargo tons by commodities are contained in the Traffic Report of the St. Lawrence Seaway published annually by Seaway Authority, not Dominion Bureau of Statistics (see Exhibits 45 and 46). But the data are only partial in coverage in the sense that only Seaway traffic is included.

Except for a great amount of data on grain in storage in elevators, as reported by weekly, monthly, quarterly, and annual publications by the Dominion Bureau of Statistics dealing with

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<sup>1/</sup> Boeing Airplane Company, Forecast of Free World Passenger and Cargo Air Traffic (1965-70-75) pp. 18-23, (published 1959).



the grain trade, there is nothing on storage and warehouse by commodities. For details in Grain Trade of Canada, published annually by the Dominion Bureau of Statistics see Exhibits 51 and 52. Grain products are not the only ones of importance insofar as storage is concerned. The Dominion Bureau of Statistics should take a comprehensive conceptual look at the storage statistics. One result might be separation of particular types of storage, or a linking of storage with particular special industries engaged as well in transportation such as the furniture moving industry. Recently the Globe and Mail <sup>1/</sup> published an article entitled "Staff moves are becoming costly factor in business". Such an article would gain from the availability of specific data on furniture moving and storage industry.

#### Passenger Traffic

Up to this point we have been mainly concerned with freight. Gaps also exist in the passenger statistics which are scattered through many different publications. In the rail traffic statistics, much detail is provided on passengers, passenger-miles, passenger train-miles and passenger revenue per passenger train-mile, for each individual railway. In the Dominion Bureau of Statistics publication, Passenger Bus Statistics, there are statistics of passengers, miles run by buses and revenue vehicle miles for Group 1, 2 and 3 motor carriers. The traffic is classed according to chartered and regular routes (intercity and rural; urban and suburban). Separate data are published for each province. But in addition to this, data on buses are included in five other Dominion Bureau of Statistics publications.<sup>2/</sup> For water passengers,

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1/ August 30, 1960.

2/ Railway Transport, Part IV contains motor bus-miles for each of 22 railways; Motor Carriers--Freight contains detail of passenger and miles run by buses; Motor Transport Traffic contains detail of mileage per bus, average journey, passengers, passenger miles, capacity seat-miles, and so on; Urban Transit contains information on revenue passengers carried for urban transit operations of intercity and rural passenger carriers; Travel Between Canada and the United States monthly and Travel between Canada and Other Countries annually carry information about travellers crossing the Canadian-American border by bus. Private automobile traffic and trans-border air and rail also are included in two publications dealing with trans-border travel.





traffic statistics appear in Canal Statistics annually and Summary of Canal Statistics monthly, as well as in the Traffic Report of the St. Lawrence Seaway (published by the Seaway Authority). Civil Aviation contains great detail on travel by air. The Air Transport Board in a publication which is not for general distribution, Origin and Destination Statistics: Mainline Scheduled Traffic of Revenue Passengers, 1955-1959, published for September and March in each of five years the number of passengers by origin and destination between Canadian stations and also between Canadian stations and of terminal points of Trans-Canada Air Lines in the United States (see Exhibit 49).

The passenger statistics create a spotty impression. There is no uniformity in them and the data are sandwiched in a variety of publications. It would be useful to have a more methodical survey by origin and destination of passenger travel by all modes of transportation. Passenger travel is one area in which the failure to coordinate statistics by different media of transport is particularly striking.

#### Recommendations for Traffic Statistics

Not every statistical series or publication relating to transport has been covered up to this stage, though the Appendix is quite comprehensive. Nevertheless, the discussion has gone far enough to indicate some structural weaknesses in the present array of transport statistics. The following are the chief weaknesses, with recommendations pointing the direction of improvement:

1. A general need is for comparable data relating traffic handled by different modes of transport. This need is specially great in a time of keen competition among carriers. Also, where data are deficient for certain modes of transportation, existing statistics should be extended to fill gaps. Railway traffic data are needed on





a basis comparable with other carriers on the same commodity classification. This necessitates conversion of present statistics or more likely introduction of a new series using the Standard Commodity Classification rather than the classification of the Association of American Railroads. In the case of trucking commodity statistics are non-existent for urban and private trucking, and the commodity classification is not detailed enough for "for-hire" trucking. Air commodity statistics do not exist. Water statistics by commodities exist for tons, but not ton-miles. Accuracy of the coastwise statistics is very questionable and the canal and St. Lawrence Seaway statistics do not cover all the traffic. These deficiencies should be remedied. One method of doing so is suggested in Chapter 4, "A Canadian Industrial Freight Traffic Survey".

2. In regard to traffic statistics, another need is to link origins and destinations to show as far as possible actual movements of traffic. Care in designing such statistics would be necessary so as to avoid going too far in revealing operations of any particular company to its competitors. In the water statistics, tonnage data are given by ports but the loadings and unloadings are not sufficiently closely related to each other. Sometimes freight is unloaded in coastal trade which, so far as the statistics show, has never been loaded. Rail traffic reports do not distinguish domestic and foreign goods originating at or destined for Canadian stations. Truck statistics are shown only by province of registry of truck. For all carriers we need proper origin and destination statistics.

3. The small size of sample in the rail carload Waybill Analysis is often criticized. But replies to questionnaires do not indicate the small sample really is useless on this account. It is possible to be more critical of some of the omissions: less than carload traffic; mixed-media; piggyback; containerized traffic and trans-border. These omissions should



be remedied in the interest of promoting efficient transport by through-routing, and in order to promote comparability of transport with other industrial statistics. Also, better analysis of competition among the different media of transport would be possible with a more comprehensive coverage of traffic. Moreover, the commodity classification used in the Waybill Analysis is a railway classification, not comparable with other carriers. Further discussion of the Waybill Analysis and traffic statistics follows in Chapter 4.

4. Another omission from present traffic statistics is details of volume of traffic benefiting from special services like refrigeration, carrier assistance in loading and unloading, milling in transit, and so on. Such information might usefully be published on a comparable basis for all carriers.

5. There is a general need to improve traffic analysis through provision of data on traffic, by commodities origin and destination. Statistics of tons, ton-miles, average haul per ton, revenue per ton-mile should be published on this basis. A proposal along these lines is set forth in Chapter 4.

6. Also, in part because of its potential usefulness as a general economic indicator, it would be worthwhile to supplement the existing rail Carloadings report, published four times a month, with a similar report on truckloadings.

7. Data on speed of service are almost entirely missing from government statistics. Train-hours in freight service is about the only time measure appearing in all the government statistics. This information appears in Parts I and IV of Railway Transport (see Exhibit 5). These are no statistics at all on frequency of service by any carrier.





There is a definite need to develop series of statistics comparable for different carriers on this subject. Even sample data indicating speed and frequency might well be sufficient.

8. Express Statistics should contain measures of express output, so as to make the data comprehensive in this special subject.

9. The categories or the presentation of trucking statistics should be simplified.

10. An explanation of the uses of railway output data and degree to which economic and technical efficiency are measurable by each of them should be included in each issue of the appropriate periodicals.

11. Commodity statistics for storage and warehousing of goods other than grain should be provided.

12. There are many freight traffic publications relating to rail transport. The publication, Railway Transport, appears only after a sizeable delay. The various volumes appeared 8 to 14 months after close of the year 1958. Also it largely duplicates earlier series. Some volumes of it probably could be omitted.

Actual rail freight rate information is confined to data for grain, published in Grain Trade of Canada annually. There is nothing published on truck rates, or urban cartage charges, or air rates. Water freight rates on grain from Fort William and Port Arthur to various points on Great Lakes are shown in Canal Statistics (see Exhibit 43), and also in Grain Trade of Canada. Nothing is published on pipeline rates or warehouse and storage rates.

For road and truck, however, there are statistics of average revenue per ton-mile. Usually revenue per ton-mile is an average of several rates, except where the commodity designation coincides exactly



with that used for rate-making purposes.

In regard to rail, the 1% sample of carload traffic in the Board of Transport Commissioners' Waybill Analysis provides a close approximation to rate information because average revenue per ton-mile is published for individual commodities. Revenues per car-mile is also stated, which is a less useful indication of price of service or rate. The information in the Waybill Analysis is particularly useful because information about traffic moving on different types of rate is given -- class rates, commodity rates, statutory rates, agreed charges and so on (see Exhibits 16 and 17). Less useful is the average revenue per ton-mile of freight for all traffic for separate railways published in several other publications.<sup>1/</sup>

For trucking, average revenue per ton-mile appears for "for-hire" trucks only (since private truckers do not levy charges on their own freight). Information is given only for six broad commodity groups and for intercity movements. Also published is information on revenue per truck and revenue per mile travelled. Such statistics are presented in the national and provincial issues of the annual Motor Transport Traffic publication.

Existing published information on pricing, even of railway services, is insufficient for production of an index of freight rates. Such an index would be useful for comparison with other price indexes. Also, it would be worthwhile to publish more information on prices charged for specific movements of freight and for rates on traffic

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<sup>1/</sup> This information appears in monthly and annual issues of Railway Operating Statistics, in Railway Transport, Parts I and II, in Canadian National Railways 1923-1958 and in Canadian Pacific Railway Company 1923-1958.



by length of haul (by mileage blocks). Pricing information is important in analysis of the transport industry and competition among carriers, and also in relating transport to other phases of industrial processing. A proposal for an index of freight rates, for each carrier, and also for specific commodities is examined in Chapter 3 -- "An Index of Freight Rates". Chapters 3 and 4 will demonstrate that the provision of more explicit pricing information could be joined with a proposal for more detailed statistics of flows of traffic, by commodity with origin and destination related. Also it would be useful to have some information on storage charges, now non-existent.

### Passenger Fares

Urban Transit contains details of passenger fares charged for each of 13 major transit systems. This is the only information relating directly to passenger fares in all the government statistics. There is nothing at all on taxicab fares.

Rail average revenue per passenger mile appears in monthly and annual issues of Railway Operating Statistics for each of the Canadian National and the Canadian Pacific and total of 22 Canadian railways (see Exhibit 12). Also these statistics appear in Railway Transport, Part II. The same type of information and also data on average revenue per passenger (as well as per passenger-mile) are published in Railway Transport, Part I, and in the publications Canadian National Railways, 1923-1958, and Canadian Pacific Railway Company, 1923-1958.

For bus traffic, the only figures on average passenger revenues are included in Motor Transport Traffic. Revenue per mile, revenue per bus, and revenue per passenger-mile are recorded there for the various provinces, but nothing of this sort is published in Passenger Bus Statistics.





A certain amount of additional information can be found in the monthly Dominion Bureau of Statistics publication, Prices & Price Indexes, where there are consumer price index series for transportation as a whole, for automobile operation, new passenger cars, gasoline, local transportation, and street car and bus fares. The pricing of passenger service is not as significant for the economy as freight rates. Nevertheless, it might be useful to bring together material on traffic and pricing of passenger services into one publication where it can be more readily used.

#### Inventory of Plant and Equipment

So far we have considered the output side of transport service, and will now deal with the inputs -- plant and equipment, fuel and materials, and labour. Publication of statistics on inputs facilitates analysis of technological changes in transport, and their effect on demand by carriers for products from other industries. Also, information on employment makes it possible to appraise the effects of technological changes and investment in new capital equipment on employment in transport. Data on wages and hours may prove useful in wage negotiations and in outside studies of wage demands.

A substantial amount of detail on plant and equipment is available for road, rail, pipeline, and water carriers, and on warehouse and storage capacity. In regard to plant and equipment, there is not the same possibility or need for standardization among carriers. Each means of transport has its own peculiar items in an inventory of plant and equipment.

In the rail statistics, substantial amounts of detail are published regarding mileage of track, car equipment, motive power, rail and ties, and so on. Capacity and type of equipment are recorded.



The main sources of such information are Railway Transport, Part III, which deals exclusively with equipment, track, and fuel statistics, and Part I of the same publication which contains "Comparative Summary Statistics" (see Exhibits 6 and 7). Part III for the year 1958 appeared (as Table 2 later in the chapter shows) nine months after the close of the year, and Part I, 14 months after the end of 1958. The delay is not as serious a matter as a similar delay in traffic statistics would be, as there is not generally the same need for analysis close after the event.

One apparent weakness in these statistics relates to the need that they should reflect clearly changes in technology. For instance, with dieselization the nature of motive power has changed considerably, and a locomotive now is very different in its capacity to do work. With technical improvements in diesel locomotives, the change could continue. It would be useful, therefore, to publish information about horsepower of diesel units in service. Locomotive-miles, for example, become meaningless if a locomotive is not a standard piece of equipemnt. It is desirable to search out some factor common to all locomotives (horsepower, for example) and to express capacity and work aone in those terms. Some advances could be made here. Also, it would be useful to have in these publications related material on dollar investment in plant and equipment, for instance in the dieselization programs of major railways.

Statistics of plant and equipment for bridges, tunnels and ferries consist of a smattering of information on two companies -- the Van Buren Bridge Company and the International Bridge and Terminal Company in Railway Transport, Part III. If bridges, tunnels, and ferries are of any separate significance, it might be useful to have a more





adequate description of their plant and equipment in the publication dealing with that subject -- International Bridge, Tunnel and Ferry Companies. For communications, existing statistics of wire and cable mileage, channel and circuit mileage, and pole line mileage probably suffice. In the publication, Express Statistics, the number of express offices is stated, and details of route mileage are published according to type of carrier -- rail, water, air, motor, and miscellaneous (see Exhibit 18). It is useful to have comparable information for the express routes of different modes of transport. Availability of express traffic information on a similar basis would round out the publication. As it is, the publication seems incomplete.

Most of the information on truck equipment, stated by capacity, type, and kind of fuel, is found in Motor Carriers -- Freight, (see Exhibit 20) with additional information on the truck population by gross vehicle weight group in Motor Transport Traffic. Also there is a great deal of information on registrations of taxicabs, buses, trucks and other motor vehicles in the annual publication, The Motor Vehicle (see Exhibit 27). The statistics are given for provinces and for municipalities. Passenger Bus Statistics contains detail of bus equipment, by region, model year, and seating capacity. Urban Transit also contains information on revenue equipment classed by seating capacity (see Exhibit 36). Detail of highway and rural road mileage and of urban street mileage appear in Road and Street Mileage and Expenditure. Trucks associated with firms offering public warehousing and storage are reported in the annual publication, Warehousing. Related material is scattered through a number of publications, and yet this may be inevitable since each of the publications relates to some distinct aspect of road transport.



For oil pipelines, information is available for each of 32 companies on pipeline mileage separately for gathering and trunk lines, and by pipe diameter. Also there is information on pumping stations on trunk lines by rated horsepower. The statistics are published in the annual issue of Oil Pipe Line Transport (see Exhibit 50). No comparable data are available yet for gas pipelines, but the publication Gas Pipe Line Transport (monthly only) is of very recent origin and an annual publication is planned which should improve the range of information provided.

Storage capacity is stated in detail for grain elevators, according to the kind of licence, in Grain Trade of Canada. For other types of storage, information on net occupiable space in cubic feet according to the kind of storage appears in Warehousing.

A very large amount of statistical material appears on the number and registered net tonnage of vessels arriving at and departing from Canadian ports. In the annual Shipping Report, such information in great detail is published separately for international seaborne shipping and coastwise shipping. Details of country of registration are also provided (see Exhibit 38). Similar material for ships arriving at and departing from National Harbours Board ports is published in the Board's annual report (see Exhibit 47). Also there are useful statistics in that publication on cargo tonnage inward and outward by foreign ships and by Canadian ships. Such data are useful in analysis of government policy toward the Canadian merchant marine and foreign shipping. From this standpoint, in addition to what is now available, it would also be valuable to have statistics relating specifically to Canadian shipping operators giving the number of ships by type and size which these operators own and the number that they charter.<sup>1/</sup>

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<sup>1/</sup> Specifically in regard to type of vessels operating through canals and the St. Lawrence Seaway, there is considerable information published in monthly and annual issues of Canal Statistics.



The publication which is supposed to deal with the Canadian merchant marine is not of much use -- Water Transportation. Experts in shipping matters declare it is not worth the paper it is written on. The publication contains information on vessels owned or chartered by Canadian marine operators according to type of vessel and location (see Exhibit 41). Apparently the difficulty is that not all Canadian carriers are included, and foreign carriers are omitted entirely. It is not possible to use the statistics in this publication to obtain a total picture of the water transportation industry. The report needs a thorough overhauling and examination from a conceptual standpoint.

Finally, in regard to the plant and equipment of air carriers, information is published in the monthly, preliminary annual, and annual issues of Civil Aviation on the average number of aircraft owned and leased by airlines. Data on airport licences in force and on aircraft registered by type appear in the annual issue only. Information on the investment in different types of aircraft might usefully be related to the types of equipment operated by the various carriers. The statistics on plant and equipment of airlines are not as detailed or comprehensive as those published for railway, road or water transport.

#### Recommendations for Plant and Equipment Statistics

1. Especially in rail statistics it is important to design statistics of plant and equipment in such a way that technological changes will be evident in the statistics. Capacity of locomotive should be stated in terms of horsepower, and locomotive-miles in the more homogeneous unit of horsepower-miles.





2. In regard to all important carriers -- rail, truck, air, and shipping -- it would be useful to relate equipment inventory explicitly to the dollar investment in it. This type of information would be useful both in analysis of technological change in the industry and of competition among carriers.

3. There should be a more adequate description of the plant and equipment of bridge, tunnel, and ferry companies, and it should appear in the publication, International Bridge, Tunnel and Ferry Companies.

4. Statistics of pipeline mileage and pumping station capacity should be published for gas pipelines similar to that now available for oil pipelines.

5. To facilitate analysis of problems of the Canadian merchant marine, it would be useful to have statistics of shipping owned and chartered (according to type and size) by all Canadian operators. Provision of such statistics should form part of a conceptual re-examination of the publication, Water Transportation.

#### Materials and Fuel

In the regular periodicals dealing with each mode of transport, there is a considerable amount of information on fuel used by the carriers. Other materials used in operations of carriers are hardly considered at all. Unless there is a demand for such information, however, it does not appear worthwhile to undertake any costly extension of statistics in this direction.

#### Labour

Earlier in this chapter, reference was made to information on wages, hours, and employees in publications of the Dominion Bureau of Statistics dealing chiefly with labour throughout all industries.



Information on average weekly wages and salaries, employment (an index), and number of employees is provided for transportation as a whole, for railways according to such broad categories as maintenance of equipment and maintenance of way, for water transportation, and for truck transportation. Similar data are provided for employment in the production of transportation equipment. This information is comparable with that provided for other industries outside the field of transportation. These data on employment in transportation, however, do not relate to individual occupations.

Employees by type of occupation are included, however, in the statistical coverage of the specialized publications dealing with each mode of transport. The number of employees man-hours worked, and earnings by category of employee are reported in the annual oil pipeline periodical. Number of employees and earnings also appear in the annual issue of Civil Aviation for airlines, in Water Transportation for employees of some Canadian ship operators, and in Urban Transit for each of 13 major urban transit systems. Regular and casual employees of warehouse and storage firms are covered in Warehousing.

Bus company employees are reported by category of job in Passenger Bus Statistics and truck employees in Motor Carriers -- Freight. General officers, office clerks, drivers, mechanics, working proprietors, and others are separately classified according to the size class of the trucking firm. Information on number of employees and the salaries is published, but not on the total hours worked. Railway employees engaged in highway transport and cartage operations are reported in the sixth volume of Railway Transport which deals solely with employment statistics. The number of employees, time on duty, total compensation, and average per hour and per year are recorded -- more detail than is published on other employees engaged in trucking.





The amount of material on employment in rail transport is considerably greater, and is published mainly in Railway Transport, Part VI (see Exhibit 11). For each of 79 categories of employee, information is presented on number of employees, time on duty in hours, average hours worked, total compensation, and average wages and salaries.

Up to the end of 1955, the railways reported to the Dominion Bureau of Statistics details of employment by various groups and the hours paid for. Now the railways report the hours actually worked, making no allowance for overtime, holidays, and vacations. The result is that the wages per hour appear higher than they did on the old basis. As a result, the average wage per hour in this publication for railway employees is not comparable with similar figures in other government publications relating to other industries. Nor can any comparison be made with statistics of average wage per hour for railway workers prior to the end of 1955. Historical continuity has been destroyed. No provision was made for linking the new and old series so that statistics prior to the end of 1955 could be compared with more recent figures. Moreover, the railways also changed the occupational grouping so that historical continuity is completely broken.

#### Recommendations for Labour Statistics

1. It is recommended that the railways be required to furnish statistics of hours paid for and average compensation per hour paid for on a basis which will permit comparison of present earnings in each occupational category with those prior to the end of 1955. The statistics of earnings of railway employees would then be on a basis comparable with earnings per man-hour in other industries. If it should prove impracticable to revert to the old basis of reporting,



the railways should be at least required to provide statistics for a single year (1960 or 1961) on the old as well as the new basis so that historical continuity can be re-established.

2. For truck, water, air, and gas pipeline employees, statistics of man-hours paid for should be published, together with averages of earnings per man-hour.

### Finances of Carriers

Financial statistics give a picture of the profit or loss position of companies in an industry or branch of industry. Over time, changes in items in an income statement or balance sheet indicate growth, stagnation, or decline. Any properly constructed accounting statements will show up whether an industry or a company is doing well or not. Financial information in varying degrees of detail and completeness are published for rail transport, trucks and buses, urban transit, Canadian shipping companies, airlines, pipelines and warehouses.

In amount of detail, the railways are most favoured. Railway Transport, Part II contains only financial statistics, balance sheets, income statements, and statements of capital stock and funded debt for each of about 30 companies. The report for 1958 appeared 13 months after the close of the year. Other publications presented railway financial statements to the public some months earlier but in less detail. Operating revenues and expenses, broken down into main categories, and also net rail operating income appear in the monthly issue of Railway Operating Statistics and later in the annual issue. Statements of income and capital account for the Canadian National and Canadian Pacific are published in the two publications of the Dominion Bureau of Statistics respectively bearing the names



of those railways. In addition, Railway Transport, Part I, the summary volume issued more than a year after the close of the period 1958, included information on disposal of net income, investment in road and equipment property, railway capital, and the depreciation and reserves of railways in total (see Exhibit 4).

In spite of the very large amount of financial information published, all of it in accordance with the "Uniform Classification of Accounts for Class I Common Carriers", it is quite difficult to relate the financial picture to the information on carrier inputs and outputs in any specific way. The financial statistics are prepared according to an accounting classification which is not related to functions or inputs or outputs. Revenues may be classed according to broad categories like "freight" and "passenger", but expenditures are not classed the same way, and could be only through an arbitrary splitting of joint expenses. Even where operations are fairly distinct, like storage, wharves, elevators, telegraph and telephone, the revenue categories for such items frequently do not seem to be comparable with the expenditure categories. And often it is difficult to distinguish what non-rail operations may be included or excluded from a given statement. Also, there does not seem to be anything about hotels at all, though these should be a fairly distinct category both as regards revenues and expenses. It would be hazardous to judge railways' efficiency from the financial statements. It would be absolutely impossible to examine any very specific aspect or location of rail operations using the published financial statistics. Another weakness of the railway financial statistics is the inclusion of obscure and relatively meaningless companies who rate first-class accomodation in these periodicals, like the Napierville Junction Railway Company.





The periodicals which contain information about railways also contain financial data on express and communications -- operating revenues and expenses, with varying degrees of breakdown by companies. Bridge, tunnel and ferry companies are included too. Railway Transport, Part II contains the income and total operating expenses of each of three Pullman, tunnel and bridge companies, the capital stock of two bridge companies, and the current assets and liabilities of one bridge company. It is not immediately apparent why some items are omitted for some companies but not for others. Data on capital, investments, taxes, and interest are provided for total ferry companies and for total bridge and tunnel companies in the periodical International Bridge, Tunnel and Ferry Companies.

The financial statistics of all carriers, voluminous as they are, are probably more impressive to an accountant than they are to a traffic executive or an economist. The questionnaire to users of statistics (Table 1) indicated a demand for information on "cost to carriers of handling shipments between specific points". Such a demand could not be met at all through the present accounting data on expenditures. This is one of the severe limitations of all of the published financial statistics. They do not carry one very far in analyzing efficiency or any aspect of specific operations.

Trucking company financial statistics, subject to exactly the same limitations as the rail statistics, are published mainly in Motor Carriers -- Freight. Statements of property account and income are published for each size group of trucking firms. Separate statements are given for the Atlantic region and for each of the other provinces (see Exhibit 19). Similar information for buses appears in Passenger Bus Statistics. The periodical Motor Transport Traffic contains



only totals of revenue from different truck movements and gross vehicle weight groups. There is nothing on expenses in this publication at all.

Balance sheets and income statements for 13 major urban transit systems are published in the annual issue of Urban Transit and total revenues of Class I carriers are reported in the monthly issue (see Exhibits 33 and 34).

Financial statements of certain Canadian shipping operators are shown in total in Water Transportation, but the statistics are of little use because they relate neither to the entire Canadian shipping industry nor to the operations of any single company. Apart from these statistics, the only financial data relating to water operations are toll revenues of the St. Lawrence Seaway (published in the Seaway Authority's Traffic Report of the St. Lawrence Seaway), also information about the revenues and expenses of railways in their water operations (in Railway Transport, Part I), and finally some statistics on capital expended by the Canadian National and Canadian Pacific Railways for steamships -- in the two publications relating respectively to these railways.

For airlines, detailed statement of property account, balance sheet, and revenues and expenditures are published annually in Civil Aviation. The monthly and preliminary annual editions of this periodical contain statements of revenues and expenses only. Separate statements for each of six or seven major airlines appear in the various Civil Aviation publications (see Exhibit 48).

Considerable detail of the financial position of each of 32 oil pipeline companies is set forth in Oil Pipe Line Transport each year. In the monthly issues, however, only quarterly





operating revenues for each of five companies are published. In the relatively new monthly publication, Gas Pipe Line Transport, total operating revenues are stated for each of 16 natural gas transmission companies. When the proposed annual issue of this publication is produced, more extensive detail of the financial situation of natural gas pipeline companies can be expected.

The main source of financial data for warehousing and storage is the annual publication, Warehousing. Unlike the rail, air and pipeline statistics, however, the warehousing statistics do not provide statements for any individual company's operations. Details of property account, operating revenue and operating expense are given for the total of 213 firms which offer public warehousing and storage with a breakdown for firms in each province.

Some additional financial information concerning warehousing and storage appears incidentally in other publications. For example, the balance sheets and statements of income and expense of the Port Colborne and Prescott grain elevators appear in the Annual Report of the National Harbours Board. In Railway Transport, Part I, operating revenues of the total of all railways from wharves, grain elevators, rents of buildings, storage of freight, and storage of parcels and baggage are published. In Part II of the same publication, operating revenues for approximately the same storage items are published for each of 31 railway companies or subsidiary companies. On the expense side, however, operating expenses are reported for the Canadian National and Canadian Pacific only, and for only coal and ore wharves and grain elevators. Since the expenses and revenues do not relate to the same items, it is difficult to draw any conclusions about the relative magnitude of revenues and expenses of storage items. Maybe this situation is inevitable in accounts of minor operations of the railways, but it is still difficult to see



what purpose is served by the publication of some of this detail.

Because railway statistics are prepared according to an accounting classification which ensures comparability with the accounts of American railways, the existing published reports are useful in their present form. Also, comparisons among Canadian railways can be drawn from these financial statements. Even so, a lot of needs are not fulfilled by the present financial statements, but tinkering with the present accounting classification would not likely help very much. The elimination of separate accounting statements for some of the smaller railway companies like the St. Lawrence and Adirondack and Roberval and Saguenay would be no great loss, but no great economy either. And only a very complete overhaul of the method of reporting expenditures data would permit analysis of costs of specific rail operations in specific localities. Shippers want to have information about the cost to carriers of handling freight between specific points, and the financial statements yield nothing of this sort. A functional approach rather than a financial approach to accounting would be necessary to obtain this type of material. The basic data would be obtainable from the costing departments of the railways rather than from the accounting departments.

From the standpoint of economic analysis, there are great limitations in the usefulness of the financial reports concerning all of the different modes of transport. The present classifications of accounts do not lend themselves readily to measuring the cost or profitability of particular operations or do not lend themselves readily to the requirements of controlling efficiency of operation. They are intended to reveal the financial position of enterprises and are valuable in that sense. The needs of the transport economist and the industrial traffic officer must be met in another way, not through balance sheets and income statements prepared by accounting departments.



### Recommendations for Financial Statistics

1. Publication of railway financial statistics on a basis permitting comparisons with American railways should continue.

2. The need for statistics to measure carriers' costs of specific operations cannot be met through the means of company financial statements.

3. Financial statements of some of the small subsidiary railway companies do not seem to have much potential use. Yet the statements have to be prepared anyway and the cost of publishing them is likely quite small. While the railway statistics seem to include extremely insignificant companies, the statistics for other carriers sometimes omit significant companies. The grouping together of a substantial number of firms in the shipping and warehousing reports limits the usefulness of the financial statements for these industries. This same criticism applies to the Water Transportation report which does not include all of the Canadian operators and so does not present a comprehensive picture of the industry. The warehousing firms might usefully be classified according to their type of operation. Also, the addition of more companies in the Urban Transit report would help to give a more comprehensive picture of the financial situation of the urban transit industry.

### Taxes, Subsidies and Government Regulations

Competition among carriers is bound to raise the question of how much each means of transport (and each company) is subsidized by the various levels of government. Where a given means of transport is subsidized while others are not, the operations of the subsidized carriers tend to expand to a greater extent than they would under a





laissez-faire policy of government toward the industry. If the subsidized carrier receives some form of capital subsidy, it can expand its investment and lower its depreciation costs. It will then be in a more favourable position than it otherwise would be to attract traffic from its competitors through more extensive service and a lower price of service. If the subsidy takes the form of a subsidized reduction in rates or charges, then more traffic moves by the subsidized carrier than would be the case if there were no subsidy. Wherever there is a subsidy, there is a tendency toward misallocation of resources inasmuch as a boost is given to service which could not otherwise pay its way. (Usually it is the inefficient and costly services which receive subsidies). There is, therefore real risk of diverting economic resources to inefficient operations when subsidies are paid. The price of so doing is disguised because the subsidy is paid through the tax rate. While there are many arguments for subsidies to bolster regional economies or to assist Canadian industries to meet foreign competition, it is well to measure and be aware of and the element of distortion which a subsidy introduced into the economy.

Accordingly, it is in the public interest to know what the subsidies are and how much they cost. Statistics showing both direct and indirect subsidies by governments to the transport industry should be published in as clear a form as possible. Also, it may be useful in the same connection to have statistics of the taxes paid by carriers to the government. Often the element of subsidy necessitates a study both of the particular tax burden on a carrier and the special subsidies he receives, because it is at least possible that the special taxes on a carrier (not paid by other carriers) could exceed his special benefits.



Cash subsidies and expenditures on construction, and land grants by the different levels of government to the Canadian Pacific Railway and other companies now part of that system are stated in the Dominion Bureau of Statistics' annual periodical, Canadian Pacific Railway Company, 1923-1958. Government loans and appropriations, federal contributions to the deficits of the Canadian National, and government subsidies to lines now part of the Canadian National System are reported in the similar publications for that railway. Aid to the railways and government guarantees of the bonds of the Canadian National are recorded in Railway Transport, Part I (see Exhibit 3). In addition, detail of railway tax accruals by level of government and by type of tax appears in Part II of the same publication. Taxes paid by express, telegraph and cable, and international bridge, tunnel and ferry companies are published in much less detailed form in the periodicals relating to those operations, but there is no information on government subsidies to such companies.

Subsidies for urban street expenditures and for highway and rural road expenditure by level of government are published in Road and Street Mileage and Expenditure (see Exhibit 32). Government revenues from motor truck licences and fees and also taxes on gasoline and other motive fuels, by provinces, are published in The Motor Vehicle (see Exhibit 28). Also, there is information on operating taxes and licences and income tax paid by totals of each of Class I and Class II motor carriers according to province in Motor Carriers -- Freight (see Exhibit 19). In Passenger Bus Statistics, there are comparable data for bus companies.





All of this information does not make it possible, however, to arrive at any very definite conclusions regarding subsidies which may in effect be paid by governments to commercial trucks through heavier and more extensive highway construction necessitated by trucks. The problem is one of separating the expenses of road construction and maintenance required for private automobiles from the expense accounted for by the presence of trucks on the roads. To arrive at a better estimate of the proper allocation of costs, it would be necessary to have better statistics than we now have regarding the amount of commercial and non-commercial traffic on highways, with detail according to the gross weight of commercial vehicles. Such information could be provided through more information on origin and destination of truck movements and a survey of passenger travel by motor vehicle. Better traffic statistics in these forms would assist the study of government subsidization of highways, which has aroused intense public interest particularly in the United States.

Government subsidies to air carriers are not reported. To a large extent these subsidies would be indirect. Statements of airport costs relative to user charges to the airlines, and of any other indirect or direct subsidies to airlines would be a useful addition to present statistics. General taxes and income taxes are published separately for different categories of air carrier and for each of six or seven major Canadian airlines. Details of total taxes and any special taxes and licences paid by Canadian airlines would facilitate analysis of the subsidization of air traffic.

Regulations imposed by the government may have a sufficiently important effect upon the economic position of an industry to warrant inclusion in published statistics. This is the case with trucking.



The Dominion Bureau of Statistics publishes quite extensive information on size, weight, safety, and licence regulations in each province. Such regulations may limit the capacity of equipment which may be used, or may impose special fees or expenses on the carriers. Regulations affecting trucks and buses are skilfully and clearly published in The Motor Vehicle: Preliminary Report of Registrations and Size, Weight and Safety Regulations and also for trucks only in Motor Transport Traffic (see Exhibits 25 and 29).

But road transport is unique in respect to publication of government regulations affecting the industry. It would be worthwhile to study what material on regulation of railways, airlines and other carriers might be published. The passenger equipment of railways, for example, is designed partly from the standpoint of safety rather than economy, and it might be useful to incorporate in some of the railway transport publications regulations which affect the types of equipment which are permitted to be used.

#### Recommendations for Statistics on Subsidies and Government Regulations

In conclusion, it is recommended that additional statistics of government subsidies, particularly to road, air and urban transit carriers should be published so that a clear picture of direct and indirect subsidies to transport will be available. Also, it is recommended that a study be made of information which might usefully be published on government regulation of different aspects of transport affecting the economic position of carriers. In order to throw further light on the question of the extent of government subsidies to commercial trucking, it is suggested that this is one function which could be usefully served by statistics showing origin and destination of truck



traffic and statistics illustrating the pattern of passenger traffic, particularly by automobile.

#### Accident Statistics

Statistics on accidents are quite well developed for all carriers. There is a specific publication dealing with road accident -- Motor Vehicle Traffic Accidents, but otherwise the accident statistics are included in the special reports for different modes of transport. The only suggestion for improvement is that statistics be provided which show (a) the cost of damage to persons and property as a result of different types of accidents, and (b) expenditures by government and private bodies on prevention of specific types of accidents.

#### Transportation Equipment

In addition to statistical periodicals dealing with each means of transport, the Dominion Bureau of Statistics issues a series of nine publications containing statistics of the manufacture of transportation equipment. The content of these periodicals is described in the Appendix, and a sample table is reproduced in Exhibit 53. The Standard Industrial Classification used by the Dominion Bureau of Statistics provides for a separate transportation equipment group, consisting of a number of sub-industries -- aircraft, ship-building, bicycles, boat building, motor vehicles, motor vehicle parts, railway rolling stock, and miscellaneous equipment. Statistics on these industries are comparable with those published for other manufacturing industries, and so the manufacture of transportation equipment can easily be compared with other industries in regard to employees and earnings, capital and repair expenditures, inventories, fuel and materials used, and value added by manufacture. This is a very useful series of publications from the standpoint of integrating transport with other industry data.





### Timeliness of Published Statistics

Even with increasing mechanization of data processing, the value of useful statistical series is often reduced by delays in publication. The problems in securing the earliest possible publication of statistical series consistent with minimum cost is a challenge to the administrative ability of officials in the Dominion Bureau of Statistics to a greater extent than to the computing equipment.

Table 2 shows, for each annual publication, the time lag in production of statistics. To arrive at the time lag, we compare the month of publication with the period covered in the publication. (On monthly periodicals, the month of publication is not shown). Many publications appear more than a year after the close of the period covered. Delays of six to nine months in publication are more frequent than lesser delays. The table contains only one recent example of each periodical, but probably represents fairly accurately the general picture of time lags in production of transport publications.

It is recommended that the Dominion Bureau of Statistics ~~examine~~ carefully the causes of delay. The problems are not entirely those of securing reports from carriers and other members of the public, of checking, designing the form of statistical tables, of processing, printing, and proof-reading. There are also problems of insufficient experienced staff, of high turnover in some occupations, and priorities of different publications over the whole range of government statistics. The annual issues of quite a few transport periodicals are supplemented by monthly editions. But the degree of detail in the monthly issues is usually much less than in the annual publication. Therefore, any effort to solve the problem of



TABLE 2  
TIMELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number | Title<br>of<br>Publication  | Current<br>Period<br>Covered                          | Month<br>of<br>Publication | Time<br>Lag | Price        |
|------------------|---|---|----------------------------|-------------|--------------|
| <u>1. RAIL</u>   |   |   |                            |             |              |
| 52-001           | Carloadings   | June 1-7,<br>1960                                     |                            |             | \$3 per year |
| 52-002           | Railway Freight Traffic   | January<br>1960                                       | -                          | -           | \$2 per year |
| 52-205           | Railway Freight Traffic:<br>Year ended December 31,<br>1958                                 | 1958  | July 1959                  | 7 months    | \$1          |
| 52-207           | Railway Transport 1958<br>Part I:<br>(Comparative summary<br>statistics 1954 to 1958)       | 1958  | Feb. 1960                  | 14 months   | 50¢          |
| 52-208           | Railway Transport 1958<br>Part II:<br>(Financial statistics)                                | 1958  | Jan. 1960                  | 13 months   | 75¢          |
| 52-209           | Railway Transport 1958<br>Part III:<br>(Equipment, track and<br>fuel statistics)            | 1958  | Sept. 1959                 | 9 months    | 50¢          |
| 52-210           | Railway Transport 1958<br>Part IV:<br>(Operating and traffic<br>statistics)                 | 1958  | Dec. 1959                  | 12 months   | 50¢          |
| 52-211           | Railway Transport 1958<br>Part V:<br>(Freight carried by<br>principal commodity<br>classes) | 1958  | Nov. 1959                  | 11 months   | \$1.50       |
| 52-212           | Railway Transport 1958<br>Part VI:<br>(Employment statistics)                               | 1958  | Aug. 1959                  | 8 months    | 25¢          |
| 52-003           | Railway Operating<br>Statistics, March 1960   | Financial -<br>March 1960<br>Operating -<br>Feb. 1960 | -                          | -           | \$2 per year |
| 52-206           | Railway Operating<br>Statistics, Year 1959  | 1959  | -                          | -           | 25¢          |





TABLE 2

(Continued)

TIELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number               | Title<br>of<br>Publication   | Current<br>Period<br>Covered | Month<br>of<br>Publication | Time<br>Lag                         | Price |
|--------------------------------|--|------------------------------|----------------------------|-------------------------------------|-------|
| 52-201                         | Canadian National<br>Railways, 1923-1958   | 1958                         | Aug. 1959                  | 8 months                            | 50¢   |
| 52-202                         | Canadian Pacific<br>Railway Company,<br>1923-1958  | 1958                         | Aug. 1959                  | 8 months                            | 50¢   |
| -                              | Board of Transport<br>Commissioners for Canada,<br>Waybill Analysis, Carload<br>All-Rail Traffic, 1958 | 1958                         | Aug. 1959                  | 8 months                            | 50¢   |
| 52-204                         | Express Statistics   | 1958                         | June 1959                  | 6 months                            | 25¢   |
| 56-201                         | Telegraph and Cable<br>Statistics 1958   | 1958                         | Sept. 1959                 | 9 months                            | 50¢   |
| 53-202                         | International Bridge,<br>Tunnel and Ferry Companies<br>1958  | 1958                         | June 1959                  | 6 months                            | 50¢   |
| <u>2. ROAD</u>                 |  |                              |                            |                                     |       |
| 53-205                         | Motor Carriers - Freight<br>1957   | 1957                         | Sometime in<br>1959        | 12 <sup>+</sup> / <sub>months</sub> | 50¢   |
| <u>Motor Transport Traffic</u> |  |                              |                            |                                     |       |
| 53-207                         | National Estimates   | 1958                         | June 1960                  | 18 months                           | 75¢   |
| 53-208                         | Atlantic Provinces   | 1958                         | April 1960                 | 16 months                           | 50¢   |
| 53-209                         | Province of Quebec   | 1958                         | Feb. 1960                  | 14 months                           | 50¢   |
| 53-210                         | Province of Ontario  | 1958                         | Dec. 1959                  | 12 months                           | 50¢   |
| 53-211                         | Province of Manitoba   | 1958                         | Dec. 1959                  | 12 months                           | 50¢   |
| 53-212                         | Province of Saskatchewan   | 1958                         | Sept. 1959                 | 9 months                            | 50¢   |
| 53-213                         | Province of Alberta  | 1958                         | July 1959                  | 7 months                            | 50¢   |
| 53-214                         | Province of British<br>Columbia  | 1958                         | Dec. 1959                  | 12 months                           | 50¢   |
| 53-203                         | The Motor Vehicle 1958   | 1958                         | Feb. 1960                  | 14 months                           | 75¢   |



TABLE 2

(Continued)

TIMELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number        | Title<br>of<br>Publication  | Current<br>Period<br>Covered    | Month<br>of<br>Publication | Time<br>Lag | Price                            |
|-------------------------|---|---------------------------------|----------------------------|-------------|----------------------------------|
| 53-204                  | The Motor Vehicle:<br>Preliminary Report of<br>Registrations and Size,<br>Weight and Safety<br>Regulations, 1958. | 1958                            | Sept. 1959                 | 9 months    | 50¢                              |
| 53-001                  | Motor Vehicle Traffic<br>Accidents, October-<br>December 1959   | October to<br>December,<br>1959 | -                          | -           | \$2 per year                     |
| 53-206                  | Motor Vehicle Traffic<br>Accidents 1958   | 1958                            | Sept. 1959                 | 9 months    | 75¢                              |
| 53-002                  | Passenger Bus Statistics  | April,<br>1960                  | -                          | -           | \$1 per year                     |
| 53-215                  | Passenger Bus Statistics<br>1958  | 1958                            | March 1960                 | 15 months   | 50¢                              |
| 66-001                  | Travel between Canada<br>and the United States,<br>May, 1960  | May, 1960                       | -                          | -           | \$2 per year;<br>20¢ per<br>copy |
| 66-002                  | Volume of Highway Traffic<br>entering Canada on<br>Travellers' Vehicle Permits,<br>September, 1959                | Sept. 1959                      | -                          | -           | \$1 per year;<br>10¢ per<br>copy |
| 66-201                  | Travel between Canada<br>and other Countries,<br>1958   | 1958                            | Sept. 1959                 | 9 months    | \$1                              |
| 53-201                  | Road and Street Mileage<br>and Expenditure 1958<br>(formerly Highway<br>Statistics)                               | 1958                            | April 1960                 | 16 months   | 50¢                              |
| <u>3. URBAN TRANSIT</u> |   |                                 |                            |             |                                  |
| 53-003                  | Urban Transit, March<br>1960  | March 1960                      | -                          | -           | \$1 per year                     |
| 53-216                  | Urban Transit 1958  | 1958                            | Nov. 1959                  | 11 months   | 50¢                              |
| 53-201                  | Road and Street Mileage<br>and Expenditure 1958<br>(Formerly Highway Statistics)                                  | 1958                            | April 1960                 | 16 months   | 50¢                              |



TABLE 2

(Continued)

TIMELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number            | Title<br>of<br>Publication   | Current<br>Period<br>Covered | Month<br>of<br>Publication | Time<br>Lag | Price        |
|-----------------------------|--|------------------------------|----------------------------|-------------|--------------|
| <u>4. WATER</u>             |  |                              |                            |             |              |
| 54-002                      | Shipping Statistics<br>February 1960                                       | February<br>1960             | -                          | -           | \$2 per year |
| 54-202                      | Shipping Report 1958<br>Part I:<br>International Seaborne<br>Shipping      | 1958                         | Sept. 1959                 | 9 months    | \$1.50       |
| 54-203                      | Shipping Report 1958<br>Part II:<br>International Seaborne<br>Shipping     | 1958                         | Oct. 1959                  | 10 months   | 75¢          |
| 54-204                      | Shipping Report 1958<br>Part III:<br>Coastwise Shipping                    | 1958                         | Nov. 1959                  | 11 months   | 75¢          |
| 54-205                      | Water Transportation<br>1958   | 1958                         | Dec. 1959                  | 12 months   | 50¢          |
| 54-001                      | Summary of Canal<br>Statistics, December<br>1959                           | Dec. 1959                    | -                          | -           | \$1 per year |
| 54-201                      | Canal Statistics 1958  | 1958                         | Sept. 1959                 | 9 months    | 75¢          |
| -                           | St. Lawrence Seaway<br>Preliminary Toll Traffic<br>Statistics, April 1960  | April 1960                   | May 1960                   | 1 month     | -            |
| Catalogue<br>No.<br>TS2-259 | Traffic re Port of the<br>St. Lawrence Seaway,<br>1959                     | 1959                         | -                          | -           | 50¢          |
| -                           | Annual Report of the<br>National Harbours Board,<br>for Calendar Year 1959 | 1959                         | March 1960                 | 3 months    | 25¢          |
| <u>5. AIR</u>               |  |                              |                            |             |              |
| 51-001                      | Civil Aviation,<br>December 1959   | Dec. 1959                    | -                          | -           | \$2 per year |
| 51-201                      | Civil Aviation,<br>Preliminary Annual, 1958                                | 1958                         | June 1959                  | 6 months    | 50¢          |





TABLE 2

(Continued)

TIMELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number                   | Title<br>of<br>Publication   | Current<br>Period<br>Covered     | Month<br>of<br>Publication | Time<br>Lag | Price        |
|------------------------------------|--|----------------------------------|----------------------------|-------------|--------------|
| 51-202                             | Civil Aviation, 1958   | 1958                             | Nov. 1959                  | 11 months   | 50¢          |
| -                                  | Air Transport Board:<br>Origin and Destination<br>Statistics: Mainline<br>Scheduled Traffic Survey<br>of Revenue Passengers<br>1955-1959 | 1959                             | May 1960                   | 5 months    | -            |
| <u>6. PIPELINE</u>                 |  |                                  |                            |             |              |
| 55-001                             | Oil Pipe Line Transport<br>April, 1960   | April 1960                       | -                          | -           | \$2 per year |
| 55-201                             | Oil Pipe Line Transport,<br>1958   | 1958                             | Nov. 1959                  | 11 months   | 50¢          |
| 55-002                             | Gas Pipe Line Transport,<br>May, 1960  | May 1960                         | -                          | -           | \$2 per year |
| <u>7. WAREHOUSE AND STORAGE</u>    |  |                                  |                            |             |              |
| 63-212                             | Warehousing, 1958  | 1958                             | Feb. 1960                  | 14 months   | 50¢          |
| 22-004                             | Grain Statistics Weekly  | July 13, 1960                    | -                          | -           | \$3 per year |
| 22-005                             | The Wheat Review<br>June, 1960   | June 1960                        | -                          | -           | \$3 per year |
| 22-001                             | Coarse Grains Quarterly,<br>May, 1960  | March, April<br>May, 1960        | -                          | -           | \$2 per year |
| 22-201                             | Grain Trade of Canada,<br>1957-58  | Aug. 1, 1957 to<br>July 31, 1958 | Sept. 1959                 | 14 months   | \$1.50       |
| <u>8. TRANSPORTATION EQUIPMENT</u> |  |                                  |                            |             |              |
| 42-201                             | Transportation Equipment<br>1957 General Review  | 1957                             | June 1959                  | 18 months   | 50¢          |
| 42-211                             | The Railway Rolling Stock<br>Industry, 1958  | 1958                             | Oct. 1959                  | 10 months   | 50¢          |
| 42-209                             | The Motor Vehicles<br>Industry, 1958   | 1958                             | Sept. 1959                 | 9 months    | 50¢          |



TABLE 2

(Continued)

TIMELINESS OF TRANSPORT STATISTICS

| D.B.S.<br>Number | Title<br>of<br>Publication   | Current<br>Period<br>Covered | Month<br>of<br>Publication | Time<br>Lag | Price        |
|------------------|--|------------------------------|----------------------------|-------------|--------------|
| 42-210           | The Motor Vehicle Parts Industry, 1956                             | 1956                         | -                          | -           | 50¢          |
| 42-204           | The Bicycle Manufacturing Industry, 1958                           | 1958                         | Sept. 1959                 | 9 months    | 25¢          |
| 42-206           | The Shipbuilding Industry, 1958                                    | 1958                         | March 1960                 | 15 months   | 25¢          |
| 42-205           | The Boat Building Industry, 1958                                   | 1958                         | March 1960                 | 15 months   | 50¢          |
| 42-203           | The Aircraft and Parts Industry, 1958                              | 1958                         | Jan. 1960                  | 13 months   | 50¢          |
| 42-212           | The Miscellaneous Transportation Equipment Industry, 1958          | 1958                         | Nov. 1959                  | 11 months   | 25¢          |
| 42-002           | Motor Vehicle Shipments, June, 1960                                | June 1960                    | -                          | -           | \$1 per year |
| 42-001           | Preliminary Report on the Production of Motor Vehicles, June, 1960 | June 1960                    | -                          | -           | \$1 per year |
| 63-007           | New Motor Vehicle Sales and Motor Vehicle Financing, May, 1960     | May 1960                     | -                          | -           | \$1 per year |
| 63-208           | New Motor Vehicle Sales and Motor Vehicle Financing, 1958          | 1958                         | July 1959                  | 7 months    | 50¢          |





earlier availability of transport statistics would pay great dividends in increased usefulness of the statistics.

#### A Statistical Program

Existing transport statistics are definitely used by the public. They are reasonably priced, as the prices listed in Table 2 indicates. Also, one can judge their usefulness partly by their circulation. Even though the various volumes of Railway Transport appear from 7 to 14 months after the close of the year, the press run required to fill the demand is around 700 copies. About 450 to 500 copies of the monthly transport periodicals are usually run off. About 1,000 copies of the volume of Motor Transport Traffic which contains the national estimates are printed, and 700 for each of the provincial volumes. The circulation of Motor Carriers--Freight also is sufficient to warrant printing 700 copies. There is also a substantial demand for the publications dealing with other means of transport. About 900 copies of Urban Transit are printed and 750 copies of the annual Shipping Report. The press run of the annual edition of Civil Aviation is about 750, and the press run of the annual Oil Pipe Line Transport periodical is 800 and steadily increasing.

Not every publication printed is used. Around 100 subscribers receive every one of the publications but might not use them all. About 75 to 100 copies go to official users, who may or may not use them. There is, however, a substantial body of additional subscribers who have to pay for the publications individually, and so may be presumed to use them now and then if not constantly.

The usefulness of existing transport statistics is corroborated by the replies to the questionnaire summarized in Table 1.



Those polled preferred some statistical publications to others, but they were a specialized group of users and the replies reflect this fact. Other users might show a preference for some of the publications which the traffic officers did not favour.

It is not a serious criticism of the Dominion Bureau of Statistics to say that there is room for improvement. The assessment of existing statistics in this chapter has pointed to some weaknesses in the structure of existing statistical publication, and yet officials of the Bureau are as familiar with many of these weaknesses as anyone else. Often it is a matter of the time, staff, and funds necessary for the highly specialized and technical task of designing improved statistical series. Also, there must be a demonstrated need and public demand for improvement. In view of the importance of the transport industry and the importance of a proper analysis of its problem, the Government should extend and improve its statistics in this field. Almost every week the newspapers carry news of some urgent transport problem. The next three chapters, therefore, in the light of the gaps and weaknesses in present statistics in the face of pressing needs, outline a program for improved Canadian transportation statistics.



### CHAPTER 3

#### AN INDEX OF FREIGHT RATES

##### Description of an Index

An index of freight rates is a means of measuring changes in the price level of freight service. The level of freight rates in a "base" period is taken as 100%, and the level of rates in some other period is expressed as a percentage of the "base" rates or price level. An index of freight rates, therefore, is like any other price index - the consumer price index or wholesale price index, but the prices to be measured are the prices for transport of freight.

An index of freight rates indicates changes in the price of freight service from month to month, or year to year, depending upon the frequency with which the index is calculated. The index will not show the absolute level of rates, but will tell us by what percentage the level of rates has changed as compared with the base period. Separate indexes can be calculated for different kinds of freight rates. Indexes can be computed on a regional, commodity, or rate-type basis. In fact, an index of freight rates for each of several commodities and regions makes possible a comparison of changing prices of freight service in different industries or parts of the economy. Separate indexes for rail and truck and other types of carrier could give useful information about competition between carriers in pricing of service.

There are several different ways of formulating an index of prices for freight service. A very crude way is to base an





index solely on horizontal rate increases granted by the Board of Transport Commissioners for traffic in general. In this form, the index would be 100 in the base year, and if there were a 10% across-the-board increase in freight rates the next year, the index would rise to 110. There is little difficulty in preparing such an index, but it can be quite misleading. A significant amount of traffic is usually excepted from general rate increases - grain moving under statutory rates, and agreed charge traffic being two cases in point. Also new subsidies which lead to lower rates are not easily taken into account in such an index. For these reasons, this form of rate index is too crude for incorporation in statistical publications.

Another concept of a freight rate index is an index based on the average revenue per ton-mile earned by railways from handling freight. The revenue collected per ton-mile amounts to a price charged by the railway for carrying a ton of freight one mile. The ton-mile is only one measure of a railway's output, speed of transit being one other factor in service for which a shipper may be willing to pay. The revenue per ton-mile basis for a price index gives no recognition to the fact that speed of service, type of handling, or special privileges and service may affect the price charged. The bulkiest commodities exert an influence on the index which may be out of proportion to their total value and importance. With all these disadvantages though, an index which reflects changes in average revenue per ton-mile from year to year still is more accurate than one which is based only on horizontal rate increases. At least average revenue per ton-mile is based on the actual traffic.

If the pattern of traffic shifts from year to year though, the changing composition of traffic may affect the index more than



changes in the rates do. For example, a shift toward increased traffic in television sets which earn a high revenue per ton-mile would raise the index of average revenue per ton-mile even though the actual freight rates for television sets and other goods remained unchanged. Therefore, the average revenue per ton-mile reflects not only the freight rates charged, but also the quantity of goods moving under each rate, and the average length of haul (wherever the average revenue per ton-mile is different for long and short hauls).

The same difficulty applies where an index is based simply on average revenue per ton. Unless the average haul is constant, the revenue collected by railways from handling a ton of freight will change depending upon the distance the shipment travels. Again, there will be changes in the index which are not related to changes in the price of service (freight rate).

The difficulty can be overcome by careful "weighting" of the average revenue in every category of traffic according to its importance in tons, and by using the same weights in each year the index is calculated. "Base year weights", which are based on the tonnage moving in each category in a typical year, freeze the traffic pattern used in the index from year to year. Any change in the index number as time goes on will then be the result solely of changes in freight rates.

The index of Average Freight Rates on Railroad Carload Traffic, published by the Interstate Commerce Commission in the United States, is calculated in a way which minimizes the influence of changes in traffic as regards commodity, and average haul. The average revenue per hundredweight (per ton would amount to the same thing) is calculated for each "traffic category" as a first step.





The "traffic category" contains traffic which is homogeneous as determined by commodity class, short-line length of haul (mileage block), type of rate, and territorial movement. The average revenue in each traffic category is then weighted by the tonnage shipped in that category in the base period. The weights (for early years of the index) stayed the same for each year that the index was calculated. This assumption that traffic in the base year was typical of the "given" years as well, ensured that any changes in the index arose from price changes and not from other causes.

In more recent years, however, the weighting system was changed to take account of an additional difficulty. The problem is that the pattern of traffic in the base year may soon cease to be typical. The importance of different freight rates may shift as some commodities become more important and others less important in total traffic. If this happens, then an index calculated for, let us say, a given year 1960 on the basis of the traffic pattern in base year 1950 may be unrealistic from the standpoint of what rates are most significant in 1960. The answer to this difficulty was found in the "chain" method of constructing indexes for the given years. From 1951 on, this method has been used by the Interstate Commerce Commission in constructing its index of freight rates.

The "chain" method involves a shift in the weights from year to year to take account of changing traffic patterns. A moving average of tonnage in each traffic category is used as the weight by which the average revenue per ton in the given year is multiplied. This two-year average of the tonnage shipped in each category ensures that the traffic pattern in the given year will affect the index, as well as the traffic pattern in the previous



year. When the weighted average revenue per ton has been calculated for, say, 1950 and 1951, using the same weight for each year (namely, the average tonnage in each category in those two years), the next step is to calculate average change in rates from 1950 to 1951. So the percentage change in the weighted average revenue per ton is calculated. If we start from 100% in 1950, and this percentage change were 2.0%, then the index for 1951 would be 102.0. The index for 1952 would be calculated from the percentage change in weighted average revenue per ton between 1951 and 1952, "chained" onto the index number 102.0. In the calculation of the change in weighted average revenue per ton from 1951 to 1952, we would use as weights the average of the tonnage in each traffic category in the two years 1951 and 1952.

Through shifting the weights from year to year in this way, we eliminate the problem of calculating the index of freight rates on the basis of a traffic pattern which may be out of date. Yet the method still ensures that the dominant influence on the index numbers from year to year will be changes in the average level of rates and not changes in composition of traffic. Four methods of calculating an index of freight rates have been discussed up to this point -

- (1) an index based on general rate increases;
- (2) an index based on an unweighted average revenue per ton-mile in each year;
- (3) an index based on the average revenue per ton in each homogeneous traffic category with base year tonnage in each category as the weight; and
- (4) an index like that produced by the third method but with a moving average of tonnages in each traffic category as the weight.

The fourth, the "chain" method is the best. It copes successfully with the problems of handling exceptions to general rate increases



and taking account of changing traffic patterns without allowing the price index to be dominated by factors other than changes in freight rates.

#### Canadian Experience

A less sophisticated method was used in calculation of an index of freight rates which was published by the Dominion Bureau of Statistics on three occasions in the 1930's. The index was greatly hampered by lack of data which are now fortunately available.

Beginning with the year 1913 and using 1926 as a base year, the Dominion Bureau of Statistics published in 1936 an index of railway freight rates up to 1933. Two years later the index was brought up as far as 1936. Later in the same year (1938), the index was corrected and brought forward to August 1938.

The final index, in tabular and graphic form, together with a table showing the weights used in the index, are reproduced in Chart 2 and Tables 3 and 4. The method used was based not on average revenue per ton as in the present American index, but rather on a selection of actual freight rates for selected hauls and representative commodities. The first step was to prepare a list of commodities representative of the 76 commodity classes for which the railways reported tonnages each year. A total of 48 commodities actually entered into the final index published by the Dominion Bureau of Statistics. It was assumed that this list of commodities was a fair sample of all carload freight carried by the railways. Then selected hauls were chosen representative of the actual movement of each of these commodities. Then freight rates for the selected hauls for these commodities were compiled for a series of years from the tariffs filed with the Board of Railway Commissioners. The rates for the various selected hauls for each





commodity were combined by taking the geometric mean of these rates. Then these geometric means, representing the freight rates for each commodity, were in turn combined through the use of weights based on tonnage reported by the railways for these commodities in 1926. Separate indexes were prepared for five commodity groups - Agricultural products; Animal products; Mine products; Forest products; and Manufactures and miscellaneous. No indexes were prepared for regions or individual commodities. The Canadian index was, therefore, much less detailed than the present American index which gives separate indexes for numerous commodities and also for territorial movements of these commodities.

The method used in the Canadian index was crude and its authors seemed to recognize its serious limitations. The averaging of selected rates for different hauls of the same commodity through use of a geometric means was a particularly haphazard device. And in the introduction to "Index of Railway Freight Rates 1913-1938" the author stated:

"Unquestionably all hauls should be weighted so that changes in rates for hauls with heavy traffic would have a greater influence on the group index than changes in rates for hauls with light traffic. The difficulty has been to secure data on the volume of traffic moving over the various routes. From the Bureau's reports of production and distribution of grain and coal, however, sufficient data were available to compute fairly satisfactory weights for the principal movements of these commodities, which, in tonnages are by far the most important commodities carried by the railways." (page 2)

The importance of coal and grain in total traffic has steadily declined since the time of this publication, and so, many of the commodities important in rail traffic today are included in the commodities for which the authors of the Canadian index were unable to find much information on the volume of traffic.



Other criticisms could be levelled at the old Canadian index of freight rates. It is questionable whether the tonnage weights used, based on 1926, were representative of traffic patterns at the two extreme given years of the index - 1913 and 1938. The reason for choosing 1926 as the base was evidently that it served as a base year for other indexes computed by the Dominion Bureau of Statistics. This does not mean that it was a typical year for freight traffic throughout the period of the index. The fixed base year weighting was unrealistic in that it did not allow for any changes in composition of freight traffic as time went on.

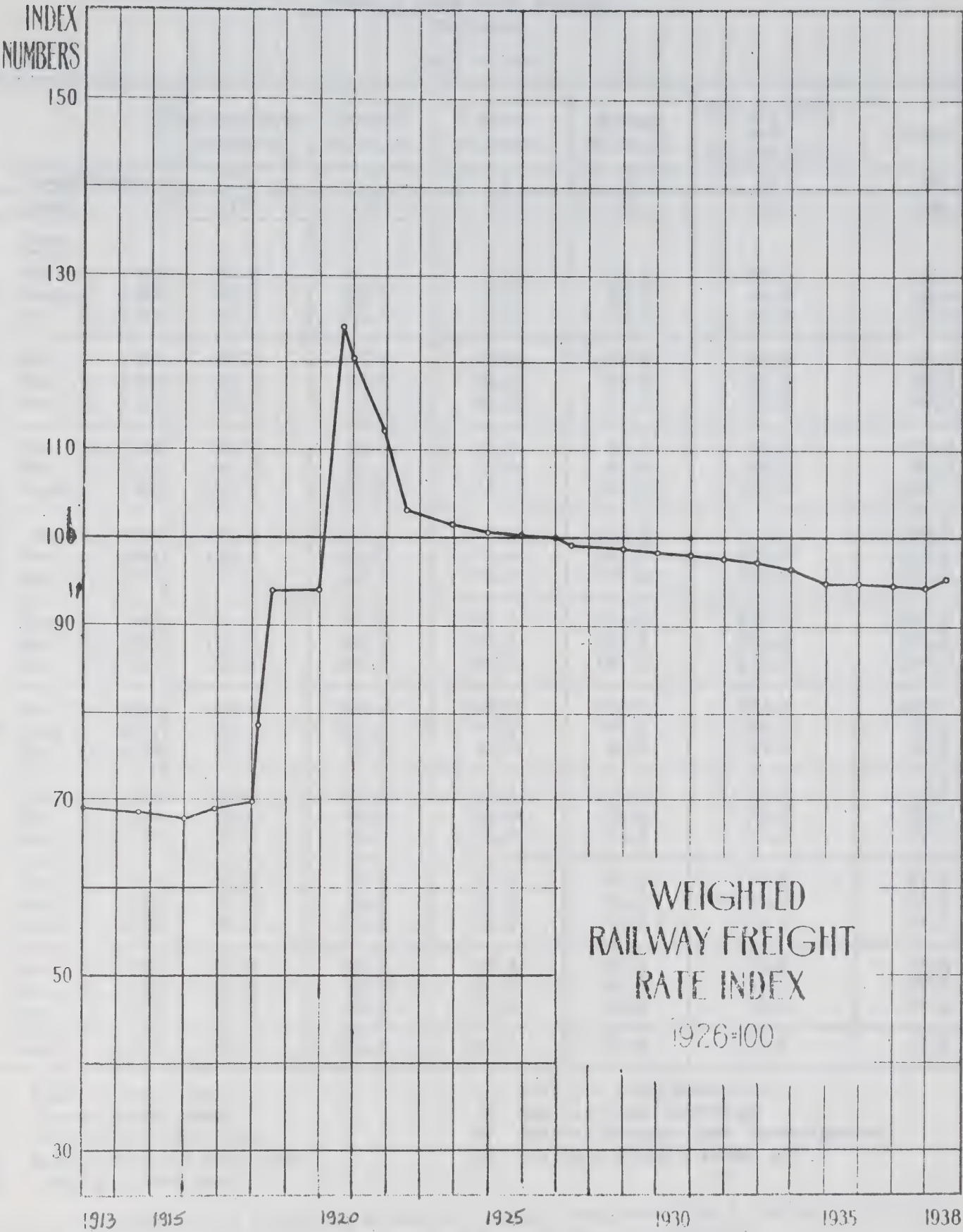
Furthermore, the process of selecting hauls for each commodity is open to question. If data on the average revenue and average haul for all traffic in a commodity were used, there would be less room for exercise of judgement as to what is representative of actual traffic. The statistics would accordingly be more complete and reliable.

Finally, more precise and numerous commodity classifications than were available in the 1930's would facilitate construction of an accurate index. In broad commodity categories it is difficult to get homogeneous rate characteristics in each category, and factors other than changes in level of rate can affect the index. In the American index there are about 30,000 traffic categories, determined by commodity class, short-line length of haul (mileage block), type of rate, and territorial movement. Data were not available to the authors of the Canadian index which would permit such a careful sorting of traffic according to rate characteristics.

The weaknesses of the Canadian index were recognized at the time to the extent that the preparation of an index of freight rates was discontinued after the third publication on account of the lack of suitable data.







SOURCE: Department of Trade and Commerce, D.B.S. Transportation & Public Utilities Branch, "Index Numbers of Railway Freight Rates 1913-1938".



FREIGHT RATE INDEX NUMBERS  
(Revised)

1926 = 100

|                   | Agricultural<br>Products | Animal<br>Products | Mine<br>Products | Forest<br>Products | Manufactures<br>and<br>Miscellaneous | Total |
|-------------------|--------------------------|--------------------|------------------|--------------------|--------------------------------------|-------|
| Commodities       | 10                       | 9                  | 9                | 4                  | 16                                   | 48    |
| Rates             | 112                      | 92                 | 88               | 49                 | 159                                  | 500   |
| <u>Date</u>       |                          |                    |                  |                    |                                      |       |
| Jan. 1, 1913      | 84.8                     | 65.7               | 71.9             | 65.9               | 60.4                                 | 68.9  |
| 1/ Sept. 1, 1914  | 83.4                     | 65.9               | 72.7             | 63.5               | 60.0                                 | 68.4  |
| Dec. 31, 1915     | 83.4                     | 66.0               | 69.3             | 63.5               | 59.9                                 | 67.7  |
| 2/ Dec. 1, 1916   | 84.2                     | 67.6               | 70.8             | 64.0               | 60.8                                 | 68.7  |
| Dec. 31, 1917     | 85.5                     | 68.6               | 71.4             | 65.4               | 61.5                                 | 69.6  |
| 3/ Mar. 15, 1918  | 94.3                     | 78.1               | 81.0             | 75.3               | 69.8                                 | 78.5  |
| 4/ Aug. 12, 1918  | 110.4                    | 90.3               | 97.4             | 86.4               | 85.9                                 | 93.9  |
| Dec. 31, 1919     | 110.4                    | 90.3               | 97.4             | 89.4               | 85.6                                 | 94.0  |
| 5/ Sept. 13, 1920 | 145.3                    | 123.8              | 114.7            | 124.5              | 116.8                                | 124.1 |
| 6/ Jan. 1, 1921   | 143.4                    | 116.8              | 112.5            | 117.5              | 113.1                                | 120.4 |
| 7/ Dec. 1, 1921   | 130.1                    | 106.4              | 110.4            | 110.4              | 104.5                                | 112.1 |
| 8/ Aug. 1, 1922   | 103.0                    | 102.7              | 103.3            | 104.2              | 102.5                                | 103.0 |
| Dec. 31, 1923     | 101.2                    | 100.3              | 100.6            | 101.0              | 102.6                                | 101.6 |
| Dec. 31, 1924     | 101.2                    | 100.2              | 100.6            | 101.3              | 100.2                                | 100.6 |
| Dec. 31, 1925     | 100.1                    | 100.2              | 100.5            | 101.3              | 100.0                                | 100.3 |
| Dec. 31, 1926     | 100.0                    | 100.0              | 100.0            | 100.0              | 100.0                                | 100.0 |
| 9/ July 1, 1927   | 99.1                     | 100.0              | 98.7             | 96.9               | 99.6                                 | 99.1  |
| Dec. 31, 1928     | 99.1                     | 99.2               | 98.0             | 96.9               | 99.6                                 | 98.9  |
| Dec. 31, 1929     | 98.6                     | 99.2               | 97.1             | 96.9               | 99.0                                 | 98.4  |
| Dec. 31, 1930     | 98.6                     | 99.0               | 96.0             | 96.9               | 99.0                                 | 98.1  |
| Dec. 31, 1931     | 97.3                     | 98.7               | 96.0             | 96.9               | 98.7                                 | 97.7  |
| Dec. 31, 1932     | 97.8                     | 99.6               | 95.6             | 96.9               | 97.3                                 | 97.2  |
| Dec. 31, 1933     | 97.0                     | 99.2               | 94.9             | 95.3               | 96.8                                 | 96.5  |
| Dec. 31, 1934     | 96.2                     | 99.2               | 93.7             | 95.3               | 93.9                                 | 94.9  |
| Dec. 31, 1935     | 95.7                     | 98.2               | 95.3             | 94.5               | 93.8                                 | 94.9  |
| Dec. 31, 1936     | 94.5                     | 98.2               | 95.5             | 94.5               | 93.5                                 | 94.6  |
| Dec. 31, 1937     | 94.9                     | 98.5               | 95.6             | 94.9               | 92.4                                 | 94.3  |
| Aug. 1, 1938      | 96.1                     | 100.0              | 97.2             | 94.9               | 93.2                                 | 95.3  |

1/ Western Rates Case.

2/ Eastern Rates Case.

3/ Fifteen per cent Case.

4/ Twenty-five per cent Case.

5/ Forty per cent Case.

6/ Five per cent Reduction.

7/ Ten per cent Reduction.

8/ General Freight Rate Investigation.

9/ Maritime Freight Rates Act.

SOURCE: Department of Trade and Commerce, D.B.S. Transportation & Public Utilities Branch, "Index Numbers of Railway Freight Rates 1913-1938".





TABLE OF COMMODITIES AND WEIGHTS USED

| AGRICULTURAL PRODUCTS |       | ANIMAL PRODUCTS                                       |      | MINE PRODUCTS       |       | FOREST PRODUCTS   |      | MANUFACTURES AND MISCELLANEOUS       |      |
|-----------------------|-------|---|------|---------------------|-------|---|------|--------------------------------------|------|
| Wheat .....           | 12.65 | Horses .....  | 0.09 | Anthracite Coal ... | 5.26  | Logs, Posts, Poles and Piling .....                             | 1.40 | Petroleum Products ...               | 2.40 |
| Corn .....            | 0.63  | Livestock .....                                       | 1.15 | Bituminous Coal ... | 13.64 | Cordwood and Firewood .....                                     | 2.00 | Sugar .....                          | 0.60 |
| Oats .....            | 1.62  | Dressed Meats (fresh)                                 | 0.46 | Lignite Coal .....  | 2.50  | Pulpwood .....  | 3.80 | Iron, pig .....                      | 0.37 |
| Barley .....          | 1.17  | Dressed Meats, (cured) and other packing house pdts.. | 0.53 | Coke .....          | 1.32  | Lumber, Timber, Shingles, Box, Crate & Cooperage Material ..... | 6.40 | Iron and Steel Products .....        | 1.47 |
| Rye .....             | 0.26  | Eggs .....  | 0.15 | Ores & Concentrates | 3.78  |   |      | Cement .....                         | 1.10 |
| Flax .....            | 0.16  | Butter .....  | 0.17 | Sand and Gravel ... | 4.70  |   |      | Bricks and Artificial Stone .....    | 0.83 |
| Flour .....           | 2.21  | Cheese .....  | 0.11 | Stone .....         | 1.50  |   |      | Lime and Plaster .....               | 0.40 |
| Hay and Straw ...     | 0.83  | Wool .....  | 0.05 | Asphalt .....       | 0.23  |   |      | Sewer Pipe and Drain Tile .....      | 0.10 |
| Apples .....          | 0.23  | Hides and Leather ...                                 | 0.16 | Salt .....          | 0.34  |   |      | Agricultural Implements .....        | 0.40 |
| Potatoes .....        | 0.63  |   |      |                     |       |   |      | Automobiles .....                    | 1.68 |
|                       |       |   |      |                     |       |   |      | Furniture .....                      | 0.09 |
|                       |       |   |      |                     |       |   |      | Fertilizers .....                    | 0.31 |
|                       |       |   |      |                     |       |   |      | Wood Pulp .....                      | 1.50 |
|                       |       |   |      |                     |       |   |      | Newsprint .....                      | 2.50 |
|                       |       |   |      |                     |       |   |      | Fish (fresh, frozen and cured) ..... | 0.11 |
|                       |       |   |      |                     |       |   |      | Canned Goods .....                   | 0.36 |

SOURCE: Department of Trade and Commerce, D.B.S. Transportation & Public Utilities Branch, "Index Numbers of Railway Freight Rates 1913-1938".





### Requirements for a Good Index

If an index is to be satisfactory, the effect of factors other than changes in freight rates must be small as compared with the effect on the index of rate changes. Each "traffic category" (to use the American terminology) must be chosen with care. Traffic within any given category must respond in a similar way to any change in rates. Appropriate data must be available for weighting the relative importance of the different traffic categories so that they can be combined into an index which accurately reflects the importance of different traffic. As far as possible, the index must be based on all rates and all traffic, rather than on a selection of rates deemed to be important. Much more data must be available than were at the disposal of the Dominion Bureau of Statistics for the preparation of its index of freight rates in the 1930's.

Fortunately, much more accurate and detailed information about traffic is now obtainable. The Annual Carload Waybill Analysis of the Board of Transport Commissioners is based on a 1% sample of all carload freight traffic moving by rail within Canada. A 1% sample of American carload traffic is used by the Interstate Commerce Commission as the basis for the American index of carload freight rates. Of course, a 1% sample of American traffic contains several times as many carloads as a 1% sample of Canadian traffic, and so a more detailed breakdown according to type of rate, region, and commodity is obtainable in an American index of freight rates. The same breakdown in a Canadian index would be based on such a small number of shipments in many cases that a reliable result would not be obtainable.

Nevertheless, the waybill analysis of the Board of Transport Commissioners, first published in 1949, would form a basis for an index of freight rates far more accurate than the original



Canadian index. The data used to prepare the waybill analysis have been retained on I.B.M. punch cards since January 1954, and would form the basis for an index of freight rates from that time on.

Looking ahead, one can hardly say, however, that an index based solely on these data would be ideal. One obvious deficiency is that the index would be entirely restricted to railway freight traffic. Truck, airline, water and pipeline freight rates would be excluded. In fact, the limitations are even more severe than that. The waybill analysis of the Board of Transport Commissioners omits traffic across the American border, less than carload traffic, and combined rail and water movements of freight. The omission of international traffic is an especially serious limitation. Exports and imports are sufficiently important to the Canadian economy to form an appreciable share of total freight tonnage. All of the limitations of the waybill analysis, if that were the basis for an index of freight rates, would be carried over into the index itself.

In order to spot further shortcomings of such an index, it is desirable to consider what uses an index of freight rates may have, and what the form of an ideal index would be.

Like other indexes of prices, an index of freight rates would be useful in demonstrating trends in prices. Comparisons between prices of freight service and of other goods and services would be useful to economists and others interested in price levels, inflation, and related matters of government economic policy. Furthermore, comparisons of trends in freight rates and in wholesale and retail prices of particular goods possibly with regard to particular regions of the country, may help to throw light on the extent to which price changes in goods themselves are related to changes in transport costs.





The pricing mechanism is vital in the economy, as the attention governmental regulatory bodies give to prices and pricing practices illustrates. The Dominion Bureau of Statistics prepares information on the prices paid by consumers for children's wear, shoe repairs, cereal products, men's haircuts, newspapers and a variety of other goods and services. In transportation, the only consumer price indexes published are for automobile operation, new passenger cars, gasoline, local transportation, and street car and bus fares. Wholesale price index numbers are published for soap, fertilizer, explosives, carpets, coal, pig iron and over 100 other products, but nothing at all is published in the form of an index of freight rates.

If economical transportation is a goal in a country where transport problems loom large, then information on pricing trends for transportation service is surely as worthy of publication as price indexes of most of the goods and services mentioned, for which a price index is now available.

In the replies of 23 companies or organizations to a questionnaire regarding use made of federal transportation statistics (summarized in Table 1), a substantial number of respondents showed interest in an index of freight rates. The respondents were all people associated with freight traffic in private industry. Of the 23, 13 said they would be interested in having an index of railway freight rates, 13 wanted a similar index for trucking, 7 wanted an index of air freight rates, 11 wanted an index of shipping rates, and 6 expressed interest in an index of pipeline rates. This sample of opinion is not large, but it does show that an interest in an index of freight rates exists, and that it would be used if published.

Just as the wholesale price index and consumer price index are prepared in detail rather than in the form of a single



index, so it would be useful to have a breakdown of an index of freight rates. An overall index tends to conceal different trends in the prices (or freight rates) of specific commodities, or in specific areas. Therefore, along this line of argument and with the American index as a precedent, if a new Canadian index were constructed, it might well be in the form of separate indexes for different commodities in different regions.

In the American publication dealing with rail freight rates, separate indexes are calculated for each of five broad commodity groups, and for more than 60 commodity classifications in which there are approximately 1,000 carloads of freight in the sample. Also there is a separate index for "forwarder traffic", whatever the commodity.

In addition, separate indexes are prepared for each commodity group in 20 regional classifications. Regional classifications are based on movements within and between the five rate territories - Official; Southern; Western Trunk Line; Southwestern; and Mountain-Pacific. Again, unless 1,000 cars or more appear in the sample, a separate index is not published: the sample would not be large enough for reliable results.

Also in the American freight index publication, separate indexes of average freight rates are calculated for interstate rates and for intrastate rates, both by commodity group. All of these indexes apply to rail carload traffic only.

If a Canadian index were to be based on the principle of publishing a separate index only where about 1,000 or more carloads can be used as the basis, the number of indexes would be much fewer than in the Interstate Commerce Commission's publication. The total number of carloads in the 1% sample of traffic used by the Board of Transport Commissioners does not exceed 20,000. In the waybill



analysis based on the sample, only a few commodity classifications contain 1,000 carloads or more - wheat, bituminous coal, gasoline, and "manufactures and miscellaneous, n.o.s.". It would not be possible on the basis of the present waybill analysis to provide a regional breakdown by commodities in an index of rail freight rates.

So far as rail traffic is concerned, if indexes are desired for regional and commodity movements, there is a need for a larger sample of traffic. Either the waybill analysis of the Board of Transport Commissioners could be expanded, or else some other method of getting traffic data should be used.

The waybill analysis is not a complete answer to the need for an index of freight rates also because it does not include truck, air, water, or pipeline traffic, or traffic by more than one medium of transport.

As time goes on, a larger sample of railway freight traffic will be facilitated by progress toward completing recording of all waybill information on I.B.M. cards. Then a 100% tabulation of tons, revenue, commodity, and origin and destination (giving mileage and regional data) would be readily available for all freight shipments. Where laborious procedures of checking mileages and rates would be excessively costly for 100% of traffic, sample checking should suffice to preserve reasonable accuracy.

Another means of obtaining more comprehensive data for a freight rate index would be through a sampling of traffic reported by shippers rather than by carriers. This device is commonly known as a "census of transportation". The advantage of this approach is that not only rail, but also truck, water, air, pipeline and mixed-media traffic data would be reported. By insistence on uniform reporting, comparability of data for rail and other carriers should





be an attainable objective. The absence of revenue data for water carriers, and the absence of reliable information on tons, mileages, and revenues of commodities travelling by truck, make it very difficult to find any existing statistical basis for an index of freight rates for water and truck. Commodity data are not available at all at present for airlines. The "census of transportation" approach would make it possible to fill all the gaps - international rail; truck; water; and airline data which could be used to build indexes of freight rates for these types of traffic. Also, if the sampling were large enough, it should make possible separate indexes for each main region and each important commodity, or commodity group.

For full availability of data for indexes of freight traffic by type of carrier, by commodity, and by region, the sampling of traffic reported by shippers has much to recommend it. The design of an appropriate index is a difficult matter calling for careful attention of experts in sampling and statistics. The actual design of an index will not be attempted here. It is suggested though, that an index of freight rates be considered with the following breakdown:

1. Separate indexes should be prepared for traffic moving by rail, truck, water, air, and pipelines, and for various combinations of these media of transport where sufficient traffic exists for a reliable index.
2. In addition, for each type of carrier, separate indexes of rates applying on traffic in the main commodity groups would be desirable. There are five of these groups - agriculture; animal products; minerals; forest products, and manufactures. If enough traffic by any medium of transport falls into a general category which cannot be classified by commodity it might be desirable also to have a separate (as "general cargo" moving by water or "bulk" traffic by air), index for such traffic. Less



than carload traffic which consists of many small shipments, might be handled as one separate category of traffic not classified by commodity.

Also, where about 1,000 carloads (as a rough criterion) fall within a commodity classification, a separate index would be justified both by the importance of the traffic and the sufficiency of the data. Individual commodities for which a separate index could be calculated would be fairly numerous if indexes were prepared on the basis of information on all traffic rather than from a small sample.

3. Regional indexes should also be constructed for traffic handled by each type of carrier. Regional divisions which might be selected are: Atlantic provinces; Quebec and Ontario; Prairies and northwestern Ontario; British Columbia and Yukon. International traffic from each of these regions, if sufficiently voluminous, could form the basis of further regional indexes. It would be desirable to separate export from import traffic, and overseas from American traffic.

Again, where enough volume falls into a single commodity category or commodity group, further detail would be possible. For example, an index of freight rates might be prepared for grain moving by rail and ocean from the Prairie Provinces overseas. And there would likely be sufficient volume to permit an index of coal moving from the Atlantic Provinces to Central Canada, and another index for coal moving from the United States to Central Canada.





4. Finally, it could be useful to have separate indexes for traffic classified according to mileage blocks, or length of haul.

These specifications relate to an ideal index of freight rates - an overall index, and also separate indexes in the degree of detail just mentioned. It may be necessary to accept a less ambitious result, or to work toward an index of this kind as availability of data and funds permit. If the waybill analysis of the Board of Transport Commissioners is used as the basis for an index of freight rates, the degree of detail will be about as limited as that in the original Canadian index published in the 1930's, though the accuracy will be greatly improved. If a "census of transportation" is used, or a 100% sample of railway waybills, then the degree of detail possible will expand accordingly. A 100% sample of railway waybills, obtainable within the next few years as the major railways expand their use of computing devices and record all traffic on punch cards, will permit a detailed picture of freight rates charged by the railways. But it will not solve the problem of getting detailed indexes for other carriers, and it may be a long time before all the major trucking firms keep records in that form. One of the important advantages of a "census of transportation" or sample of traffic reported by shippers would be the availability of a fair amount of detail on traffic by all carriers, including traffic moving by more than one medium, as soon as the sample of traffic was established and yielding results.

An index of freight rates in reasonable detail and of fair accuracy would be useful to transport economists, industrial freight traffic departments, and to others concerned with the pricing of transport service. Such an index need not be strictly comparable



with the index published in the United States to be useful in relation to the Canadian economy. The index would gain in usefulness, and its detail could be expanded as time went on without any loss of historical continuity. Because of the deficiencies of the earlier Canadian index, no attempt should be made to link a new index with the old one. It might be best to begin with an index of modest detail for the years 1954 to 1960 using the waybill data collected as a 1% sample of domestic carload rail traffic by the Board of Transport Commissioners. A "census of transportation" would permit more adequate indexes to be started within the next few years for different types of carrier. If this plan were to be followed, the cost of a "census of transportation" would not be chargeable solely to the index of freight rates. The index would be only one statistical product of such a sampling of Canadian freight traffic.



## CHAPTER 4

### A CANADIAN INDUSTRIAL FREIGHT TRAFFIC SURVEY AND A REVIEW OF AMERICAN PROPOSALS FOR A CENSUS OF TRANSPORTATION

#### The U.S. Census of Transportation

In the United States, legislation was passed in 1948 authorizing a "Census of Transportation" to assist in overcoming the inadequacy of transportation data. The Census was to be conducted in 1949 and every fifth year thereafter. No such census has ever been taken, however, because Congress never has authorized the necessary funds. In spite of this fact, the U.S. Department of Commerce still backs strongly the proposed Census of Transportation so as to make available information not obtainable through reporting by the carriers to the Federal Government. Such a census would involve collection of data from shippers, vehicle owners, and private households through the medium of the regular census authority.

The proposal for a Census of Transportation envisages six sets of interrelated surveys. One survey would cover the commodity distribution of freight moved by land, air, and water. Movements of freight would be categorized according to mode of transport, region, market channel (retail, wholesale, interplant), and class of shipper. Initially, general statistics would be published for two major classes of shippers - manufacturers and agricultural assemblers, with detailed breakdowns for each of twenty representative industry groups. Through this survey, the U.S. Government and public would obtain



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information on the channels of distribution, markets, and means of transport of products of significant industries. Not only would such information throw new light on the role of transportation in industrial processes, but also it would make possible better forecasting of demand for transportation service. Such forecasts should not only assist industry, but would also make possible more accurate estimates by the carriers and the Government of the cost of transportation service.

#### Improved Determination of Carriers' Costs

Two recent publications of the U.S. Department of Commerce stress the importance of a Census of Transportation in improving determination of carriers' costs. One publication is entitled Federal Transportation Policy and Program, published in March 1960, and the other, Rationale of Federal Transportation Policy, is a fuller statement of the justification for the conclusions arrived at in the policy statement. The statement of policy recommends that funds be provided for the Census of Transportation, and points out that one of the numerous benefits will be "an improved basis for forecasting probable traffic volumes, which improves cost estimation because of the relationship between unit costs and demand for transportation service"<sup>1/</sup>. The explanatory pamphlet links the Census of Transportation to the need, born of an increasingly competitive environment, for improved determination of specific transport costs. The relationship is stated as follows:

"With the adoption of a marginal cost pricing system, the estimation of future traffic will occupy a place of increasing importance in transportation costing, due to the close relationship between such costs and traffic volume. Since competitive rate actions by all types of carriers are justified only if they increase net income, and as this result is achieved only where response in volume lowers unit costs, accuracy in forecasting volume changes is an essential of meaningful costing for rates relating to the future. Projection of future volume is,

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<sup>1/</sup> U.S. Department of Commerce, Federal Transportation Policy and Program, p. 20.



however, largely dependent upon the availability of better information as to current geographical and industrial origins, weights, sizes and amounts of traffic, the distances it moves, the rates that move it, and the types of carriers involved. Such information can be comprehensively provided only by a census of transportation ..."1/.

Improved determination of transport costs is, therefore, in the opinion of the U.S. Department of Commerce, one of the main advantages of the Census of Transportation, and it will result from the survey of commodity distribution. Five other sets of surveys are included in the proposal, but since they are less vital to the present study, they will be simply listed at this point and dealt with later. These surveys include a survey of passenger travel by land, air and water, and also surveys of truck and bus inventory and utilization. Air cargo commodity movements constitute another entity for study. And finally, developmental surveys will be undertaken to develop new methods and techniques for taking transportation surveys.

The survey of commodity distribution is, nevertheless, of prime importance, and will be considered here at some length as it is directly related to Canadian experience and needs.

Some of the conditions creating new statistical requirements for the American transportation industry have appeared also in Canada. Increasing competition with other media of transport, particularly trucking, has led Canadian railways to pay increasing attention to determination of transport costs. In the transportation business, each carrier is interested in both his own costs and those of his competitors, and if ratemaking is governed by the cost of service principle, the regulatory authorities become nearly as concerned with costs as the carriers. Improved forecasts of traffic made possible through a survey of commodity movements on a more comprehensive scale

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1/ U.S. Department of Commerce, Rationale of Federal Transportation Policy, p. 39.





than presently exists become important under these competitive conditions in Canada as well as in the United States. The inadequacy of both the Waybill Analysis of the Board of Transport Commissioners and the railway freight traffic publications of the Dominion Bureau of Statistics have already been referred to in Chapter 2. And so a Canadian Census of Transportation would have advantages in facilitating improved cost determination in Canada.

From the standpoint of the public regulatory authorities, the beneficiary of an intensive survey of Canadian freight traffic would not be solely the Board of Transport Commissioners. Air freight rates fall within the jurisdiction of the Air Transport Board, certain rates on grain under the Board of Grain Commissioners, pipeline tolls under the National Energy board, and seaway tolls under the St. Lawrence Seaway Authority. All authorities responsible for regulation of rates and services would stand to gain from better estimates of traffic flows and demands for transportation service. Consistent decisions of the different regulatory authorities might also be facilitated through an improvement in cost-finding processes.

#### Other Benefits from a Freight Traffic Survey

Improvement of costing techniques is not the only or necessarily the most important benefit which would result from a Canadian census of transportation. Comprehensive information on the volume of freight by commodity, by carrier, by region, and by industry and type of shipper would be useful in itself to those engaged in market research or solicitation of traffic.

An extremely important benefit would be the availability for the first time of commodity data on a comparable basis for all types of carrier. No data at all are available by commodities for air cargo.



Truck traffic is broken down into commodity groups but not into individual commodities. Commodity data for traffic moving by water includes a very large category of "general cargo". The railways' classification of commodities is based on that of the Association of American Railroads and is only roughly comparable with the Standard Classification of Commodities used by the Dominion Bureau of Statistics for other carriers and for its international trade statistics. All of these weaknesses of the present statistics have been dealt with in Chapter 2. All of them would be overcome if a detailed traffic survey obtained information from shippers according to one uniform commodity classification whatever the means of transport utilized. The availability of comparable statistics of traffic for all modes of transport would be an important advantage, making possible better analysis of competition among carriers, and filling significant gaps in present information.

Data would also become available to permit a consistent index of freight rates for all media of transport. It is also likely that other new series would become possible yielding valid comparisons between rail, truck, air, and water carriers.

General economic analysis based on transport data would likewise benefit from the availability of comparable information for all forms of traffic. Rail carloadings, for instance, were once a commonly used indicator of economic activity, but lost much of their significance as traffic was drained away from the railways by competing carriers. A comparable series for carloadings and truckloadings would restore the usefulness of the indicator.

Certain types of traffic that are not now clearly identifiable could be distinguished. A census of transportation would permit a clearer separation of export and import from domestic traffic than now exists (particularly in the case of rail and truck). Traffic moving by



more than one medium of transport could be identified and characterized. The true origin and true destination of shipments could be identified and linked one with the other, whereas in present statistics the origins and destinations are not necessarily original or ultimate (as the case may be) and are rarely connected to show the actual haul.

The greater detail of traffic flows would make possible a much better integration of transportation data with industry data. After all, transportation is only one phase in the economic process of production and distribution of goods for sale. Its main significance in the economy is in relation not to itself but to the production of goods. One would accordingly expect that a substantial function of published transportation statistics would be to permit analysis of producers' transport costs and services in relation to other aspects of the production process - purchase of materials, employment of labour and machines, promotion, distribution and pricing of the product. Here is one important field in which our present statistics fall down. A commodity survey similar to that in the American proposal for a Census of Transportation would meet this need. Not only would industrial users of statistics benefit, but also the prospects for integration of the transport industry into defence mobilization would be greatly improved.

For all these reasons, much more detailed traffic statistics would prove extremely useful. Canadian experience of this type of survey indicates that such surveys would be not only useful but practicable.

#### Experience with Confidential Survey

The Dominion Bureau of Statistics in July, 1956 began an Industrial Freight Traffic Survey to provide the Board of Transport Commissioners with information needed for equalization of freight





rates. The newsprint industry through their association first conducted a detailed traffic survey and then asked the Board of Transport Commissioners to carry out similar surveys for other industries. The Board was given the results of the newsprint survey. The Dominion Bureau of Statistics subsequently surveyed a number of industries, different ones each year, and asked shippers accounting for the bulk of the traffic to keep records of shipments for a month (later one week in each month). Any water shipment over 20,000 pounds was included, and any carload shipment by rail or truckload shipment by truck, but small shipments (including any shipments by air) were omitted from the survey. The results of the survey were kept strictly confidential and were never published, but were judged by the Dominion Bureau of Statistics and the Board of Transport Commissioners to be successful. Also, experience was gained in this type of survey.

Statistics from the survey were not put on a yearly basis by the Dominion Bureau of Statistics, nor was any attempt made to obtain continuing reports from each industry from year to year. The Industry Freight Traffic Survey does not, therefore, provide much more than a test run for a continuing survey.

In addition to the Government survey, a private survey of traffic in canned goods yielded usable results, with data comparable for rail and truck carriers.

#### Support and Objections by Industry

A regular, comprehensive freight traffic survey would meet with both support and objections from private industry. The railways would likely welcome such information, because it would assist in the forecasting of traffic and provide useful tools for tailoring rates to costs so as to meet competition. Traffic officials in industry would likely also welcome information which facilitated forecasts of



future business, and trends in the transportation industry. For example, in the questionnaire sent to traffic officials (see Table 1), the respondents generally supported the need for publication of statistics which a Census of Transportation would make available. Of 23 respondents, 12 expressed a desire for statistics of containerized traffic, and 10 wanted statistics of piggyback and fishyback traffic. In other words, these replies indicated support for more information on some of the new trends in traffic. More significant, there was also fair support for the statistics which would mainly result from a census survey: "truck carloading figures similar to rail carloadings already published" (8 out of 23 favoured such data); "volume of traffic by main commodity and origin and destination" by rail (11 in favour), truck (11), air (4) and water (9).

On the other hand, opposition from some, if not many, shippers would be certain. Some firms customarily protest to the Dominion Bureau of Statistics about the great burden of reporting. In industrial firms, accounting departments which prepare the reports are more likely to protest than traffic departments or market research departments which find more use for the publications of the Dominion Bureau of Statistics. The extent of opposition from business firms will depend in part too on what information is required. There would be much less objection to divulging information about tonnages shipped than there would to be revealing the type of rate applying on shipments or the amount of revenue paid to carriers for transport service. Firms are reluctant to let their competitors know their costs of shipping and might also be reluctant to reveal the information to the Government for inclusion in published statistics.

It seems, therefore, that a comprehensive traffic survey would meet with both approval and objections. So far as the burden





of reporting is concerned, it would be greatly reduced if the survey were taken every three to five years rather than annually.

#### Design of a Canadian Survey

The design of a regular Canadian survey of industrial freight traffic would be a matter for statistical experts. Experience in Canada and in pilot surveys carried out by the U.S. Department of Commerce in connection with the proposed Census of Transportation indicate that a method of securing satisfactory results is available.

In broad outline, the procedure in a Canadian survey might be as follows. In the first place, it would be necessary to select industries for inclusion in the first survey. In view of the large scope of the undertaking, there is much to be said for choosing industries for the initial survey which are important in the economy, have a fairly high concentration of shipments in a manageably small number of reporting firms, and which ship fairly standard products. Industries with a large number of small firms and a large range of heterogeneous products will be more costly and difficult to survey, and may well be left for inclusion in later surveys when experience has been gained with the survey. There is no need to cover every industry, especially at the start, because results obtained for important industries will be quite useful even if all industries are not covered.

When industries have been selected, a mailing list should be compiled from records kept by the Census Division of the Dominion Bureau of Statistics. Not every firm in an industry must be included in the survey. It should be sufficient to secure reports from firms accounting for a substantial share (70% or more) of shipments of sales in the industry. Firms chosen for inclusion should make



available to the Dominion Bureau of Statistics records of shipments in and out of the plant in the form of bills of lading, sales invoices, or other appropriate documents. In a pilot survey conducted by the U.S. Bureau of the Census for the canning and preserving industry in August 1955, the Bureau used portable microfilm equipment to obtain records from the reporting firms. The experiment was a success and it was concluded that use of this equipment "substantially cut costs,<sup>1/</sup> reduced reporting effort, and increased the accuracy of results".

A similar method might be used in a Canadian survey. One of the main objections to the survey by reporting firms is likely to be the burden of reporting. If the work of recopying documents is handled by the Dominion Bureau of Statistics with the use of microfilm equipment, objections to the reporting burden would not be so significant. The collection of data for the survey should be based on a scientifically designed sampling procedure. The appropriate agencies for design of the sample and collection of the data would appear to be the Sampling Consultation Section and the Transportation Section of the Dominion Bureau of Statistics. In the American Government, statistical processing is organized in such a way that the Bureau of the Census is the appropriate body for conducting the Census of Transportation, but in Canada the Census Division need not play any special part in the industry traffic survey apart from providing mailing lists of firms in each industry.

The Canadian industrial freight traffic survey should be conducted every three to five years, with a small sample survey annually to permit interpolation of traffic statistics for each year. Eventually, the survey should be broadened to include most if not all Canadian primary and manufacturing industries. The entire survey should be based on the Standard Commodity Classification so that results will be comparable for all carriers and also with other

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<sup>1/</sup> U.S. Department of Commerce, Program for a Census of Transportation: A Series of Transportation Surveys, (August 1956), p. 39.



statistical series published by the Dominion Bureau of Statistics, such as the international trade statistics.

The data collected from the records of shipping firms should include: the tons and commodity in each shipment, the revenue paid to the carrier, the type of carrier, the class of rate, and the point (or area) of origin and destination. Also, to permit integration of the survey results with other industry data, shipments should be classed according to "into" or "out of" plant and according to market channel (manufacturer, wholesaler, or interplant). Also shipments should be classified according to the industry of shipper and consignee - something of an input-output basis. Small shipments should be excluded from the survey in the interests of reducing the burden of collection of data, but air cargo should definitely be sampled. Separate data should be obtained for special types of traffic - piggyback, fishyback, containerized traffic, and freight forwarder traffic. There may be a special problem in identifying the commodities in such traffic, and shippers may be unaware in many cases by what mode of transport their shipments are carried (if they are under contract with a freight forwarder, for instance). In such cases it may be necessary to approach the carriers or freight forwarders for information which will help to identify the commodities and means of transport in such shipments.

Also, it would be desirable to categorize separately urban and inter-urban traffic; export and import and domestic traffic; and to obtain information on the commodity breakdown in traffic moving by water in the "general cargo" category, by air in the "bulk transportation" category, and in private trucks. For these latter categories of transport, no commodity data are now published.





The cost of an industrial freight traffic survey cannot readily be estimated until its scope is determined and the sampling programme is designed. It would cost more if the survey were conducted for every industry annually than it would if only major industries were covered and complete surveys were taken only every five years. In practice, it is likely that not all industries would be included, or if they were, that full detail need not be made available for those industries where sampling and accurate reporting prove difficult. Possibly some idea of cost is conveyed by the budget requirement estimated for the American Census of Transportation in 1958. The entire programme for a year in which a comprehensive survey was planned (until Congress failed to appropriate the funds) was estimated to cost \$1,200,000. This amount covered all of the six sets of surveys. The budget allotment proposed for the "Commodity Distribution by Land, Air, and Water Transportation" (corresponding to an industrial freight traffic survey) was \$500,000. A Canadian survey could certainly be undertaken for less, and the appropriation would be required only once every three to five years when a full survey was conducted. Annual appropriations for sample surveys to secure data for interpolation between the "census" years would be substantially smaller.

Furthermore, it might prove to be possible to eliminate certain statistical series now prepared by the Government on the basis of reports from the carriers. If the coverage of traffic were sufficiently broad, the Annual Waybill Analysis of Carload All-Rail Traffic prepared by the Board of Transport Commissioners would become superfluous. Also, the data on traffic in the Dominion Bureau of Statistics publications Railway Freight Traffic and Railway Transport, Part V might be scaled down. Since the commodity classification used in these publications is comparable to that used



by the Association of American Railroads, some information might still usefully be prepared on the present basis.

The availability of advanced techniques for electronic data-processing and of a film optical sensing device for input to computers<sup>1/</sup> ("FOSDIC") has speeded up census tabulations in the United States. These same modern techniques could be applied to process data for a Canadian industrial freight traffic survey within a reasonably short time after the close of the reporting period. Eventually, monthly data might be published not too long after the end of each month through the medium of such a survey, but the immediate objective should be publication of comprehensive statistics of traffic every three to five years with less detailed interpolations published annually.

A survey of industrial freight traffic could usefully be patterned on the commodity distribution survey planned for the American Census of Transportation. But it is misleading to label a Canadian survey of this type as a "Census of Transportation". For one thing, the Census Division of the Dominion Bureau of Statistics would have very little part in the proposed survey. Also, such a label might convey the impression that the survey of freight traffic was part of the regular census of population, while there is actually no connection. Finally, the five additional sets of surveys planned as part of the American Census of Transportation need not be linked at all with the Canadian survey of freight traffic. Accordingly, a preferred title for the Canadian survey recommended in this chapter would be "The Canadian Industrial Freight Traffic Survey".

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<sup>1/</sup> See "Editorial" in Traffic World, July 30, 1960, p. 5.





The other surveys to be included as part of the American Census of Transportation will now be considered briefly. While some of the needs which they are intended to meet also exist in Canada, the appropriate statistical method may be different in the two countries.

Air cargo commodity movements, one of the sets of surveys in the American census, can be sufficiently documented if air cargo is included in the "Canadian Industrial Freight Traffic Survey". Already Dominion Bureau of Statistics collects information on bus and truck equipment, and it is difficult to see any need for starting all over again with another method. Collection of this information from the carriers, as at present, should suffice. Highway statistics and passenger bus statistics may be improved as time goes on, but there is nothing inherently wrong with the present system of reporting and collection of data.

Finally, a survey of "Passenger Travel by Land, Air, and Water Transportation" was to be included in the American Census of Transportation. The need for a comprehensive study of domestic passenger traffic definitely exists in Canada. In fact, this is one of the important recommendations of the next chapter in this report. The methods used in such a survey would be quite different (and the sources of information would be different) from those employed in a survey of freight traffic. Accordingly, the two should not be linked together especially, and consideration of a passenger traffic survey is left for the next chapter.

In conclusion, it is recommended that a "Canadian Industrial Freight Traffic Survey" be instituted immediately to meet the need for information which will: (1) permit better forecasts of traffic and



carrier costs, (2) make possible comparisons of traffic by commodity handled by different modes of transport, and (3) allow better integration of data concerning transportation of a product with data on its manufacture, distribution, and sale. Other benefits would include the filling of serious gaps in commodity statistics for transport by air, water, truck, and certain types of rail freight. A separate index of freight rates for each medium of transport could be compiled, by commodities, on the basis of information about rates, carrier revenues, and volume of traffic yielded by the survey. Finally, the data developed through a Canadian Industrial Freight Traffic Survey would be of great value in any emergency where the economic resources of the nation had to be mobilized for defence. The needs are pressing, the methods are available, and the projected is highly recommended.



CHAPTER 5A PASSENGER TRAFFIC SURVEY AND OTHER PROPOSALSPassenger Traffic Survey

The weakness of present statistics of passenger traffic is one of the important problems which a forward-looking program of transport statistics should meet. The existing statistics of passenger traffic are not coordinated and integrated in one publication, but are spread through a half dozen different periodicals. For some media of transport the coverage is much better than for others. Only for airlines has there been any material published on passenger traffic flows between specific points. More statistics are needed which explicitly relate traffic moving between major points by each carrier and by private vehicles. Our statistics of trans-border travel are much more highly developed than our statistics of domestic passenger travel. One method of remedying these defects and of providing information useful for analysis of a number of important economic problems would be through a Survey of Passenger Traffic.

Such a survey would serve a number of purposes. Competition is keen in passenger traffic, and the railways particularly face disturbing trends in their traffic and cost of providing passenger service. If the railways were able through a better, cheaper service to attract even a fairly small fraction of traffic from travel by private automobile, their financial situation would be definitely improved. Also, with increasingly heavy investment in expensive equipment and with the constant threat of rapid obsolescence through technological changes, the airlines need improved information on patterns of domestic and international passenger travel. The airline companies are not equipped to gather such information themselves. Then too, the tourist industry generally --





hotels, restaurants, and travel bureaus -- would stand to gain from more complete data on the extent, pattern, and trends of passenger travel.

In addition, more information on traffic by passenger automobile, in company with more complete data on commercial truck movements between specific points and classed according to vehicle weight group, would improve greatly the possibility of assessing the relative use made of highways and roads by private and by commercial vehicles. Only then is it possible to throw clear light on the controversy over the extent to which commercial trucking pays its share of the cost of road and highway construction and maintenance. If the volume and nature of truck traffic is such as to occasion greater expenditures in respect to roads than can be met through special taxes and licence fees paid by commercial users, then commercial trucking is subsidized by other taxpayers. If the reverse is true, and trucks pay more than their share of highway costs, then commercial trucking is subsidizing private vehicle traffic. Answers to this question are inconclusive at present, and more adequate statistics of passenger and truck traffic would facilitate a more informed approach to this difficult problem. Material which could form the basis for a sound allocation of road costs would be of interest to railways, the trucking industry, and provincial governments who levy the taxes and pay the bills for highway construction and maintenance.

Finally, a Survey of Passenger Traffic could throw useful light on urban economic problems. One of the great problems posed by growth of large metropolitan areas like Toronto and Montreal is traffic congestion. The transport of people as well as goods in a large urban area is a crucial factor in the economy of the municipality.



Large unseen costs arise from excessive delays in moving goods and people. Huge expenditures are incurred for improved roads to help move the ever-increasing traffic. Yet at the same time urban transit systems have such difficulty in covering expenses that they have commonly fallen into municipal ownership where their unhealthy state is only partly concealed by exemptions from taxation. Therefore, within the urban areas themselves, particularly the very large ones, more information is needed about the pattern of passenger travel to permit intelligent solutions to the transport problem.

To meet the challenges of urban transport, provincial and municipal governments and the public at large need to know more about passenger commuter traffic by bus and railway and about revenues and expenses of the carriers in providing this type of service. This is one instance in which publication of railways' costs of providing specific service would be in the public interest. Also we should know more about the pattern of travel by private automobile and by mass transit facilities. Each municipality needs special studies of its own peculiar problems, but the availability of comparable statistics of passenger traffic in all the large urban areas in Canada will make it easier for each community to know where it stands in relation to other cities with similar problems. Whether to spend vast sums on new throughways or to subsidize low fares to urban transit riders or to pay the railways and buslines to provide more commuter service -- these are some of the difficult decisions which can be made correctly only if adequate statistics are available. Such statistics can be developed on a comparable basis for all our big cities like Vancouver, Winnipeg, Montreal, and Toronto through a passenger traffic survey carried out at the federal level of government.





The Dominion Bureau of Statistics is already planning a survey of passenger automobiles. It is hoped that the survey can be organized in 1961 and conducted in 1962. The present plan is to secure replies from owners of motor vehicles in order to get information on the use made of each automobile in the sample, the average gasoline used, and average mileage. It may also be possible to obtain answers to questions concerning trips over 100 miles in length. The material obtained in this survey would be useful in the allocation of road costs to highway and private vehicle users, and would also provide information on urban transport.

A survey of larger scope, however, would meet a larger need. In addition to data on passenger travel by private automobile, it would be useful to have material on travel by each mode of transport -- bus, taxi, aeroplane, train, and ship. This comprehensive Survey of Passenger Traffic would then provide comparable statistics of travel by each type of carrier according to the distance travelled and the specific location. If such a survey were conducted every three to five years, it would then be possible to note changing patterns in passenger travel. The method of conducting the survey would have to be developed by sampling and statistical experts. Usable results could likely be obtained through hotels and motels, through transportation companies themselves, and through polling the passengers and automobile owners. Results obtained only through the questioning individuals about their trips might be weak because the human memory is not always very accurate. A combination of methods is likely to yield the best results.



The results of the Survey of Passenger Traffic might well be published in a separate publication, or integrated with other passenger traffic data now published by the Dominion Bureau of Statistics. In addition to reporting passenger traffic movements by length of trip, by means of transport, and by geographic location, the publication might also contain information on the hotel and motel industry.

A survey of Passenger Traffic would meet such a large number of needs in relation to provision of efficient intercity passenger service and effective solutions to urban transport problems, that it is recommended as one of the key proposals in a program of improved transportation statistics.

#### A Program of Transportation Statistics

The chief recommendations for improving upon the present coverage of transport statistics are: (1) a Canadian Industrial Freight Traffic Survey; (2) an Index of Freight Rates; and (3) a Survey of Passenger Traffic. These recommendations form part of a program. The various aspects of the program affect each other, and they also affect existing published statistics. For example, the Industrial Freight Traffic Survey will provide information which is necessary for constructing an Index of Freight Rates for the different means of transport. Both the freight and passenger traffic surveys, conducted every three to five years, will make it possible to improve and extend existing statistical series dealing with traffic. We can expect that the publications, Railway Freight Traffic, Motor Transport Traffic, and the Shipping Report could all be improved as a result of the more precise information on commodity flows by origin and destination available from a Canadian Industrial Freight Traffic Survey. And some existing publications might possibly become redundant as a result of the new statistical series emerging from



the new traffic surveys and the Index of Freight Rates.

All of the statistical tables published by the Government on transportation should form parts of a consistent whole. It is therefore important for the Dominion Bureau of Statistics to undertake a conceptual review of all its transport publications. Unless a statistical periodical is reviewed once in a while, it tends to become a matter of habit, and is published even if its usefulness diminishes. A review of the functions performed by each periodical will have greater significance if it takes place within the framework of a concerted effort to make transport statistics serve the needs of the coming decade, not the decades past.

Such a comprehensive review is entirely appropriate in the 1960's, which are likely to be a time of keen competition within the transport industry and also keen competition in world markets in which much of the product of Canadian industry is sold. At such a time efficiency of transport service is important for each carrier and for other industries which must ship their products to highly competitive foreign markets or meet tough competition from imports. One way of promoting efficient transport service is to publish more information on the traffic and service of each mode of transport. Great improvements are needed in the provision of comparable statistics of traffic with detail by commodities and regional movements for road, rail, air, water, and pipelines. Better statistics are needed on the relationship between carriers' investment and their inventories of plant and equipment. More information is needed on subsidization of transport companies by governments. Also it is important to commence publication of a data concerning a variety of transport and storage operations which are assuming the character of distinct





industries -- trucking of milk, livestock, and automobiles, freight forwarder traffic, and furniture moving. A reappraisal of the transport statistics in publications of the Federal Government should take account of these needs of the 1960's.

Some of the glaring gaps in present transport statistics can be filled by the International Freight Traffic Survey, by the Index of Freight Rates and by the Passenger Traffic Survey. Many existing statistical series can be improved simply by extending the coverage or speeding up publication. Use of material derived from the proposed traffic surveys will make possible in some publications more accurate and meaningful statistics. Other publications may be eliminated. Once a review of this kind has been decided upon, it is primarily the task of expert statisticians to design the improvements and to recommend the form in which new statistical series should appear. The design of methods and form of presentation of statistics is a highly technical procedure which can best be undertaken by the Dominion Bureau of Statistics. To get the program of improved transportation statistics under way, the Bureau must have the assurance and instruction from the Government that this program is one of high priority on which time, resources, and money shall be spent. The problems of the transport industry and the urgency of efficient, low-cost transport in our times are so pressing that a high priority is indicated for modernization of our transport statistics.

#### Recommendations in Detail

In the text of this report, particularly in Chapter 2, there are many detailed recommendations for improvement of our existing transport statistics. These recommendations relate to gaps or weaknesses in our statistics of traffic, pricing of transport services, employment and earnings, investments in plant and equipment, government subsidies, and financial reports of carriers. It is recommended that the



Dominion Bureau of Statistics examine the reason for an average time lag of over six months after the close of the year in publication of annual transport statistics. All of these recommendations point to deficiencies or directions where improvement is needed.

The urgent need for improvement does not imply any criticism of the Transportation Section of the Dominion Bureau of Statistics whose officials are well aware of the advances which could be made if staff and funds were provided. The recommendation of prime importance in this report is that these officials be given both the instructions and the means to institute a program of modernization of the transport statistics. A review of existing statistics and design for improvements would cost very little. The program itself would cost more, depending upon the scope and methods used, but the public benefits would be many-sided and large.

#### Responsibility for Publication

If a program of statistics for publication is to be properly conceived and coordinated, it must be under one single authority. Because of the statutory authority assigned in this field to the Dominion Bureau of Statistics, it must be the responsibility of this agency of government. As a practical matter too, the Dominion Bureau of Statistics is the only agency which is in a position to develop a broad and consistent program covering transportation and relating it to statistics of other industries and international trade.

The primary responsibility of the Dominion Bureau of Statistics in the field of statistical publication does not rule out the need for other government departments and boards to develop their own statistics for internal use. The administrative requirements of the Department of Transport, for example, require the processing of statistical





material by the Department's own staff and with its own computer equipment. Also, the Board of Transport Commissioners, the Air Transport Board, the National Harbours Board, and certain other government agencies as well must develop transport statistics to suit their own requirements. The questionnaire sent to industrial traffic officials revealed that most of the companies polled had devised their own transport statistics for internal use. Major railways in Canada, including the government-owned Canadian National, prepare statistics for inclusion in their annual reports, along with financial statements. And various government departments and boards present statistical tabulations in their annual reports. All of this activity is entirely reasonable and in the public interest.

When it comes to the publication of periodicals dealing with transport statistics, however, the responsibility should be assumed entirely by the Dominion Bureau of Statistics and by no other agency of government. The annual Waybill Analysis: All-Rail Carload Traffic should accordingly be published by the Dominion Bureau of Statistics even if the Board of Transport Commissioners continues to compile the data and have it processed by computers belonging to the Department of Transport. The power to decide upon publication of this information in periodical form should rest with the Dominion Bureau of Statistics. Unless this authority rests with the Bureau, there will be a tendency for other departments and boards to publish the statistics which they have developed initially for their own use, and then to duplicate or supersede the publications of the Dominion Bureau of Statistics in certain fields. The final result will be a proliferation of statistical agencies with varying degrees of statistical competence, and great difficulty in ensuring a consistent, comparable, and continuous body of statistical information. The Dominion Bureau of



Statistics may not always be able to attract as many first class technical experts in the field of transport as it needs, but cooperation between technical boards and departments and the Bureau should overcome this difficulty. Therefore, it should be the task of the Dominion Bureau of Statistics with such consultation as it considers necessary with other departments to develop as soon as possible a Program of Transportation Statistics to meet the needs of the 1960's and future decades.

September 8, 1960.

D. Eldon



CATALOGUE OF STATISTICAL SERIES PUBLISHED  
IN FEDERAL GOVERNMENT PERIODICALS RELATING  
TO TRANSPORT (WITH EXHIBITS)

The statistical content of every periodical published by the Federal Government relating to transportation is described in this Appendix. Also, the agency of the Government which is responsible for preparing the material for the publication is mentioned in each case. Since price of a publication may influence the extent of its use, this too is mentioned. In most cases, judged by standards of private publications, the price is low considering the length and content. Most of these publications are produced by the Dominion Bureau of Statistics, but important periodicals also stem from the Board of Transport Commissioners for Canada and other agencies of the Government.

The publications are classed according to the medium of transport with which each mainly deals. The following are the classes:

- Rail;
- Road;
- Urban transit;
- Water;
- Air;
- Pipeline;
- Warehouse and storage;
- Transport equipment.

Each description of statistical content of a periodical is related to some specific recent issue. Content may vary somewhat from issue to issue, and reference is made to a definite date of





publication in the interests of precision. Since emphasis in this Appendix is on the kind of data published rather than on the time period covered by a given statistical series, however, the precise month and year to which series relate have been omitted. An impression on the time period covered can be gained from the Exhibits.

#### 1. RAIL

D.B.S. 52-001. Four Times a Month. Price: \$3.00 per year.

##### CARLOADINGS, June 7, 1960.

This publication contains statistics of number of cars loaded:

- 47 commodities and l.c.l.;

Also total piggyback and cars from connections;

- Eastern and western divisions;

One issue each month includes a monthly summary of cars and tonnage loaded and index.

3 pages; 3 tables.

Prepared in Transportation Section of the Public Finance and Transportation Division of the Dominion Bureau of Statistics.  
(see Exhibit 1).

D.B.S. 52-002. Monthly. Price: \$2.00 per year.

D.B.S. 52-205. Annual. Price: \$1.00

##### RAILWAY FREIGHT TRAFFIC

Data are classified according to the Freight Commodity Statistics Classification of Association of American Railroads (used in Canada as of January 1, 1957).

Statistics are published of the tons of freight carried by total of 22 Class I and II, Railways in Canada.



1. Annual issue shows for each commodity:

- tons originated or loaded (including imports at lake or ocean ports);
- tons received from U.S. rail and destined to Canada; or destined to U.S.;
- tons terminated or unloaded (including exports at lake or ocean ports);
- tons delivered to U.S. rail connections.

Separately for Canada, for each province, for Atlantic Provinces, and for four Western Provinces.

2. Monthly issue shows for each commodity:

- same data for Canada as annual issue;
- for each province tons loaded and tons unloaded only.

January 1960 issue contains 3 tables; 17 pages.

1958 issue: 13 tables and 2 summary tables; 85 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 2).

D.B.S. 52-207. Annual. Price: 50¢.

RAILWAY TRANSPORT 1958 PART I (COMPARATIVE SUMMARY STATISTICS  
1954 to 1958)

1. C.N.R. railway bonds guaranteed, year ended December 31, 1958. (Detail).
2. Aid (Land Grants in Acres) granted to each of six railways (by level of government), 1942 to 1958.
3. Land Grants, cumulative total at December 31, 1958 by each government - bonus grants and grants for right of way, etc. - total to all railways.
4. For total Canadian railways (number unspecified) each year, 1954 to 1958:





- aid to railways - cumulative total \$ to Dec. 31,  
by level of government;
- first main track mileage, by provinces and U.S.;  
also by gauge. Second main; industrial; yard track  
and sidings; mileage;
- investments (\$) in road and equipment property, year  
ended Dec. 31 - separately in road, equipment, general,  
undistributed (C.N.R.; C.P.R.; others);
- railway capital - stock; debenture stock; funded debt;
- depreciation and reserves of railways - road and rolling  
stock; other properties; operating and deferred  
maintenance; insurance and casualty; investment; other;
- income account: Total railway operating revenues,  
expenses, tax accruals, other income and expenses and  
disposal of net income. (detail of operating revenues  
and expenses);
- operating statistics: Locomotive miles (steam and diesel  
and other) in freight; passenger; train switching; yard  
switching; work train service; train-miles-freight;  
passenger (locomotive and motor unit car); car-miles-freight  
(loaded; empty; caboose, etc.). Also passenger by type of  
car separately for locomotive and motor unit car);  
Averages per mile of road; etc.;  
Tons; ton-miles; gross ton-miles; train hours; average  
haul per ton; etc.;  
Passengers; passenger-miles; average passenger per car;  
average distance per passenger, etc.;  
Average revenue statistics;
- taxes, each province and by type of federal tax;
- tons carload freight by commodities; l.c.l. tons;



- freight cars in service (number and capacity) by type of car;
  - passenger cars (by type);
  - locomotives in service (coal; oil; and diesel electric by type);
  - fuel consumed by locomotives (freight, passenger, etc.) and rail motor cars (by type) - tons and cost. Other fuel consumption;
  - rails laid (detail);
  - switch and bridge ties placed in track (detail);
  - cross-ties purchased; placed in track (detail);
  - Accidents:
    - Persons (by category) injured in train and non-train accidents and dying after 24 hours;
    - Time lost by employees through injuries (detail);
    - Accidents resulting from movement of trains (by cause);
    - Persons (by category) killed and injured in train and non-train accidents, by cause; by class of victim;
    - Highway crossing accidents (by type of protection at crossing);
  - highway crossings (rural and urban) by type of protection, for each province.
- 34 tables; 31 pages.

Prepared in Transportation Section of the Public Finance Division. (see Exhibits 3, 4, 5, 6, 7, 8).

D.B.S. 52-208. Annual. Price: 75¢.

#### RAILWAY TRANSPORT 1958 PART II (FINANCIAL STATISTICS)

Data are classified according to the "Uniform Classification of Accounts for Class I Common Carriers by Railway" (September 1955 issue - prescribed for C.N.R. and C.P.R. effective Jan. 1, 1956 and for all other roads Jan. 1, 1957).



1. Operating revenues and expenses:
  - for each of 31 railway company items including U.S. lines in Canada and C.N.R. in Canada & U.S.;
  - detail of operating revenues - transportation - railway line; incidental;
  - detail of operating expenses with greater detail for C.N.R. and C.P.R.;
  - revenue per ton-mile of freight; revenue per passenger-mile;
  - total operating revenues and expenses - joint facility, express, communications, and highway transport (rail).
2. Other income:
  - detail for each of 32 railway company items;
3. Income and total operating expenses of each of 3 pullman, tunnel and bridge companies. Capital stock, funded debt, and detail of current assets and current liabilities of VAN BUREN Bridge Co.
4. Railway tax accruals:
  - detail for each of 29 railways, by province or country;
5. Capital stock, funded debt, for 33 companies, also subsidiaries.

Detail of current assets and current liabilities for 24 companies.

9 tables; 51 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (see Exhibits 9 and 10 for style of presentation).

D.B.S. 52-209. Annual. Price: 50¢.





RAILWAY TRANSPORT 1958 PART III (EQUIPMENT, TRACK AND FUEL STATISTICS).

1. For each of 27 to 30 railway companies:
  - number of cars and aggregate capacity in freight passenger, and company service by type;
  - number of motor vehicles;
  - number of units motive power and tractive power, by type of locomotive;
  - mileage (total and route miles) of first main track; second main track; industrial; yard tracks and sidings;
  - first main track mileage by provinces and territories and U.S.
2. C.N.R. - changes in first main track mileage by provinces and states.
3. For total railways (number unspecified):
  - railway track mileage under construction at December 31;
  - rails laid (new and relay), tons and cost, by weight of rail;
  - fuel (coal, diesel, oil, fuel oil, gasoline) consumed by locomotives (in freight, passenger, switching, work service) and by rail motor cars;
  - amounts of Canadian and imported fuel (tons and gallons) delivered to fueling stations in each province, Yukon, and U.S.

8 Tables; 13 Pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

D.B.S. 52-210. Annual. Price: 50¢.



RAILWAY TRANSPORT 1958 PART IV (OPERATING AND TRAFFIC STATISTICS)

For each of 22 Class I and II Railways in Canada:

1. Passenger;
  - number of revenue passengers;
  - passenger-miles;
  - gross ton-miles;
  - car-miles by type of motive power and type of passenger car; caboose car-miles.
2. Freight;
  - tons, revenue; non-revenue;
  - ton-miles-revenue; non-revenue;
  - gross ton-miles;
  - train-hours;
  - car-miles by type of motive power, loaded and empty; caboose car-miles.
3. Freight, passenger and caboose car-miles in work train service;  
  
Train-miles; by freight, passenger and work train service by type of motive power;  
  
Locomotive-miles- exclusive of switching, by freight, passenger, and work train service;  
  
Locomotive-miles; train switching and yard switching.
4. Express;  
  
Car-miles in freight and passenger trains by type of motive power;  
  
Express car-miles in work train service.
5. Motor bus miles and motor truck miles.  
  
6 tables; 29 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (see Exhibit 9).





D.B.S. 52-211. Annual. Price: \$1.50.

RAILWAY TRANSPORT 1958 PART V (FREIGHT CARRIED BY PRINCIPAL COMMODITY CLASSES)

Data are classified according to the Freight Commodity Statistics Classification of Association of American Railroads.

Tons of freight carried by each of 22 Class I and II Railways in Canada:

- tons originated - loaded at points in Canada (including imports at lake or ocean ports);
- received from U.S. rail connections;
- tons terminated - unloaded at points in Canada (including exports at lake or ocean ports);
- delivered to U.S. rail connections;
- also carloads loaded at points in Canada.

Separately for each commodity and railway.

2 tables; 148 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 10).

D.B.S. 52-212. Annual. Price: 25¢.

RAILWAY TRANSPORT 1958 PART VI (EMPLOYMENT STATISTICS)

Data are classified according to the Canadian Classification of Railway Employees and their Compensation.

1. Separately for C.N.R., C.P.R., total 19 Class II Railways:

For each of 79 categories of employee, and for communications, express, cartage, highway transport (rail) and outside operations:

- number of employees (monthly average);
- time on duty (hours);
- total compensation;
- average hours worked;
- average salaries and wages per hour and per year.



2. For total Class III and IV Railways, and for all Railways:

- for 4 groups of employees (falling into 79 categories not shown separately, and for communications, etc.;
  - also for pullman and international bridge company;
  - number of employees and other data same as (1).
- 6 tables; 14 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 11).

D.B.S. 52-003. Monthly. Price: \$2.00 per year.

D.B.S. 52-206. Annual. Price: 25¢.

### RAILWAY OPERATING STATISTICS

1. Financial:

- total operating revenues and expenses and net rail operating income for 22 Class I and II Canadian Railways. Breakdown into main categories of revenue and expense given for total 22 railways, C.N.R., and C.P.R.

2. Operating Statistics:

For total of 22 railways, C.N.R. and C.P.R.:

- miles of road operated;
- freight traffic - tons (revenue freight); ton-miles (revenue and non-revenue);
- passenger traffic - passengers and passenger-miles;
- gross ton-miles - freight and passenger;
- train-miles - freight, passenger and work service;
- car-miles - freight, loaded and empty; passenger;
- number of employees - railway;
- pay roll - railway total and amount chargeable to railway operating expenses;
- averages per day per mile of road; )
- averages per freight train miles; ) Derived from financial
- miscellaneous averages. ) and operating data



March 1960 issue contains 5 tables; 7 pages. (see Exhibit 12).

1959 issue: 5 tables; 6 pages. (see Exhibit 13).

Prepared in Transportation Section of the Public Finance and  
Transportation Division.

D.B.S. 52-201. Annual. Price: 50¢.

CANADIAN NATIONAL RAILWAYS 1923-1958

D.B.S. 52-202. Annual. Price: 50¢.

CANADIAN PACIFIC RAILWAY COMPANY 1923-1958

"Uniform Classification of Accounts for Class I Common  
Carriers by Railway" (adopted Jan. 1, 1956). C.N.R. and C.P.R.  
accounts stated on bases as nearly similar as possible (see C.P.R.  
1923-1958, pp. 8-9).

1. For each railway (in its respective publication):

Each year 1923- to 1958:

- income account; total operating revenues and expenses  
(in C.N.R. separated for Canadian and U.S. lines);  
fixed charges; net income;
- capital account; receipts and expenditures (detail);
- operating statistics:
  - miles of road;
  - revenue freight tons; ton-miles;
  - revenue passengers carried; passenger-miles;
  - freight, passenger, and passenger train revenue;
  - freight and passenger train miles;
  - averages per mile of road operated;
  - averages per freight train mile and passenger  
train miles;
  - average ton-miles per loaded car-mile;
  - average haul; average passenger journey;
  - average revenue - per ton, passenger, ton-mile  
and passenger-mile;
  - employees and pay roll;
  - operating ratio.





## 2. For C.P.R.:

- mileage and capital of leased railways, 1958;
- cash subsidies and land grants (detail), to 1958;
- securities outstanding each year 1922 to 1958;
- dividends, each year 1923 to 1958.

## 3. For C.N.R.:

- Government loans and appropriations each year 1923 to 1958.

D.B.S. 52-201. C.N.R. - 5 tables; 22 pages.

D.B.S. 52-202. C.P.R. - 6 main tables; 19 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibits 14 and 15).

Board of Transport Commissioners for Canada

WAYBILL ANALYSIS: CARLOAD ALL-RAIL TRAFFIC 1958 - Price: 50¢

1% sample of domestic Canadian carload freight traffic, showing:

- number of carloads;
- revenue;
- weight (tons);
- ton-miles;
- average revenue per ton-mile;
- average haul per ton;
- car-miles;
- average revenue per car-mile.

Classified:

## 1. By type of rate:

- class, commodity, multiple rates and mixed shipments at carload rates; U.S. related rates (official);
- competitive, non-competitive, statutory, agreed charge.



Separately for traffic originating in each region (Maritime; Eastern; Western) and destined to each region (Tables 1-A, 1-B, 1-C).

2. By commodity - Freight Commodity Statistics Classification of the Association of American Railroads:

- all traffic (Table 2);
- separately for traffic originating in each region and destined to each region (Table 3).

6 tables; 39 pages.

Prepared by Economics and Accounting Branch, Board of Transport Commissioners. (see Exhibits 16 and 17).

D.B.S. 52-204. Annual. Price: 25¢.

#### EXPRESS STATISTICS, 1958.

For each of 5 express companies:

1. Financial;
  - operating revenues (detail);
  - operating expenses (detail);
  - capital stock (detail);
  - investments in real property; equipment; miscellaneous physical property; other;
  - tax accruals by provinces and territories. Federal Government and other.
2. Value of financial paper issued (by type);
3. Equipment - road and platform vehicles (by type) and road vehicles used in cartage services (by type);
4. Employees - number and salaries - full time and part-time; commissions;
5. Express offices;
6. Route mileage by type of carrier and province, territory, U.S. or ocean-going;
7. Accidents - persons injured; killed.





1 table; 7 pages.

Prepared in Transportation Section of Public Finance and  
Transportation Division. (see Exhibit 18).

D.B.S. 52-201. Annual. Price: 50¢.

TELEGRAPH AND CABLE STATISTICS, 1958

For each of 10 companies:

1. Cost of property and equipment.
2. Revenues accrued in Canada (detail); other income;  
Expenses (detail);  
Taxes - income and other.
3. Telegrams sent; received (detail);  
Cablegrams sent; received (detail).
4. Money transfers by country of origin and destination.
5. Wire and cable mileage (detail);  
Channel and Circuit mileage (detail);  
Pole line mileage (detail);  
Number of offices.
6. Employees - number; salaries; commissions.

Also: Messages handled by Marine radio stations of Department  
of Transport, by province.

7 tables; 15 pages.

Prepared in Transportation Section of the Public Finance  
and Transportation Division.

D.B.S. 53-202. Annual. Price: 50¢.

INTERNATIONAL BRIDGE, TUNNEL AND FERRY COMPANIES, 1958.

Separate totals for ferry companies; bridge and tunnel  
companies:

1. Operating revenues (detail);  
Operating expenses (detail).



2. Investments; capital; taxes; interest.
  3. Employees (by type); number of full time and part-time; salaries.
  4. Traffic (passengers; trucks; buses; motorcycles, etc.).
  5. Accidents:
    - number of persons (by category) killed and number injured.
- 10 tables; 11 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

## 2. ROAD

D.B.S. 53-205. Annual. Price: 50¢.

### MOTOR CARRIERS - FREIGHT, 1957

Separately for total Group I carriers (largest); Group II; Group III; Group IV (smallest) by provinces (Atlantic Provinces total):

1. No. reporting:
  - property account;
  - total cost of property, vehicles, etc.;
  - accrued depreciation reserve;
  - operating revenues (freight and other). (Greatest detail in case of Groups I and II; less for III, still less for IV).
  - operating expenses;
    - maintenance; wages; fuel; insurance; depreciation; taxes; rents; bridge, tunnel and ferry tolls (greatest detail for Groups I and II; less for III and IV).
  - income taxes;
  - other income.
2. Traffic statistics (Groups I, II, III only):
  - tons freight;
  - fuel by type;
  - separately for intercity and rural; city:



passengers- regular routes, also charter; miles  
run by buses - regular routes, also charter.

3. Employees:

- Group IV only; employees (number; salaries) and  
working proprietors (number; allowances);
- separately for Groups I, II, III:  
Number employees and salaries for general officers;  
Office clerks; drivers and helpers; mechanics -  
maintenance; other. Also working proprietors (number  
and allowances).

4. Revenue equipment (number) - Groups I, II, III only:

- trucks (by capacity); road tractors; semi-trailers (by  
capacity); trailers (by capacity); buses (by capacity);
- vehicles with diesel engines (trucks; road tractors;  
buses);
- vehicles with liquefied petroleum engines.

5. Accidents (total of Groups I, II, III):

- number of persons killed and number injured - by type  
of person;
- number of accidents resulting in property damage  
over \$100;
- total property damage (\$).

9 tables; 17 pages.

Prepared in Transportation Section of the Public Finance and  
Transportation Division. (see Exhibits 19 and 20).

MOTOR TRANSPORT TRAFFIC, 1958

Price: National Estimates - 75¢; others - 50¢ each.

- D.B.S. 53-207: National Estimates,
- D.B.S. 53-208: Atlantic Provinces,
- D.B.S. 53-209: Province of Quebec,
- D.B.S. 53-210: Province of Ontario,





D.B.S. 53-211: Province of Manitoba.

D.B.S. 53-212: Province of Saskatchewan,

D.B.S. 53-213: Province of Alberta.

D.B.S. 53-214: Province of British Columbia.

One publication of estimates for all Canada; 7 separate publications of data for trucks registered in each province.

## National Estimates

(Graphs: Truck registrations by type of operation;) Also in each  
 Net ton-miles by type of operation; ) provincial  
 publication  
 (see Exhibit 21).

- tons carried by type of operation (each province);
- intercity traffic by Commodity group - tons of goods carried.

### Statistical Tables:

Truck traffic by Canadian registered trucks.

1. By gross vehicle weight, total Canada only.

Separately for total truck traffic (for-hire; private intercity); Intraprovincial Intercity Traffic (for-hire; private intercity); Total International and interprovincial (for-hire; private intercity).

- also by 6 commodity groups (agricultural; animal; mine; forest; manufactures and miscellaneous; N.O.S. general freight). (For classification of commodities, see Exhibit 25).

Separately for Intraprovincial intercity traffic (for-hire; private intercity);

Total interprovincial and international (for-hire;  
private intercity).

For total Canada, the following statistics are given:  
(see Exhibit 23).









5. Average truck population in Canada, by gross vehicle weight.  
By each province.  
- separately for "for-hire"; private intercity; urban; farm.
6. Survey response, by each province.  
Number of trucks selected in samples; number of questionnaires returned, etc. Separately by "for-hire"; private intercity; urban; farm. (see Exhibit 25, pp. 22-23).  
- reliability of statistics - sampling variability; range.  
(detail);  
- copy of questionnaire. (see Exhibit 25, page 25).
7. Description of vehicle classifications by type of truck.  
Licence regulations in each province. (see Exhibit 25, page 24).

#### Atlantic Provinces

Same statistics and detail, where applicable, separately for total trucks registered in Atlantic Provinces; Trucks registered in Newfoundland; Prince Edward Island; New Brunswick; Nova Scotia.

No data on traffic by commodities for these individual provinces though. Data for Total Atlantic Provinces only.

#### Other Provinces

Same statistics and detail, where applicable, for trucks registered in each province. Data on traffic by commodities for each individual province are included.

#### Passenger Buses

These data are included in the following publications only:

Ontario;  
Manitoba;  
Saskatchewan;



Alberta; (see Exhibit 26)

British Columbia.

For buses registered in the province:

By passenger seating capacity, separately for traffic performed by buses inside and outside the province; traffic within the province.

1. Mileage - Total; Average yearly mileage per bus; Average distance per passenger.
2. Fuel - Gallons and miles per gallon-gasoline; diesel oil; other.
3. Passengers; Passenger-miles; Average number of passengers carried per mile.
4. Capacity seat miles; % of capacity utilized.
5. Revenue (\$) - Total passenger revenue; Revenue per mile, Revenue per passenger-mile; Revenue per bus.

|                              |                                  |
|------------------------------|----------------------------------|
| National Estimates           | - 17 tables; 27 pages; 4 graphs; |
| Atlantic Provinces           | - 19 tables; 18 pages; 2 graphs; |
| Province of Quebec           | - 11 tables; 12 pages; 2 graphs; |
| Province of Ontario          | - 13 tables; 13 pages; 2 graphs; |
| Province of Manitoba         | - 13 tables; 13 pages; 2 graphs; |
| Province of Saskatchewan     | - 13 tables; 13 pages; 2 graphs; |
| Province of Alberta          | - 13 tables; 14 pages; 2 graphs; |
| Province of British Columbia | - 13 tables; 13 pages; 2 graphs. |

Prepared in Transportation Section of Public Finance and Transportation Division. (see Exhibits 21 to 26).

D.B.S. 53-203. Annual. Price: 75¢.

#### THE MOTOR VEHICLE 1958

For each province:

1. Registrations of motor vehicles:



- motor vehicle licences - passenger; motor trucks; taxicabs; buses; motorcycles; trailers. (Detail)
  - other licences (drivers'; dealers'; gasoline outlets; garage licences).
2. Average population per motor vehicle;  
Average population per passenger car;  
Average number of passenger cars per family.
  3. Motor vehicle registrations by municipalities. Separately for passenger; commercial.
  4. Provincial revenues from motor vehicle registrations and gasoline tax. (Detail by type of fee, tax, or licence).
  5. Taxes on gasoline and other fuel. Regulations. (Detail by provinces).
  6. Gasoline sales (\$) - Gross; Net. (Tables and graph).  
By months;  
Net sales of diesel oil.
  7. State of unsatisfied judgment funds in each province.
  8. Regulations. Summary of reciprocal highway agreements for trucking, September 1959.  
14 tables; 3 graphs; 33 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibits 27 and 28).

D.B.S. 53-204. Annual. Price: 50¢.

THE MOTOR VEHICLE; PRELIMINARY REPORT OF REGISTRATIONS AND SIZE, WEIGHT AND SAFETY REGULATIONS 1958

For each province:

1. Registrations of motor vehicles:
  - motor vehicle licences - passenger; motor trucks; taxicabs; buses; motorcycles; trailers. (Detail).
  - other licences (drivers'; dealers'; gasoline outlets; garage licences).





Also: Average population per motor vehicle;

Average population per passenger car;

Average number of passenger cars per family.

(Exactly same data as in D.B.S. 53-203, Annual, The Motor

Vehicle 1958 (see Exhibit 27) but published earlier with unrevised figures).

2. Size and weight regulations for commercial vehicles in effect March 31, 1959. (Detail)
  3. Safety regulations for commercial vehicles in effect March 31, 1959. (Detail)
- 3 tables; 13 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 29).

D.B.S. 53-001. Quarterly. Price: \$2.00 per year.

D.B.S. 53-206. Annual. Price: 75¢.

#### MOTOR VEHICLE TRAFFIC ACCIDENTS

By each province and Total Yukon and Northwest Territories:

1. Number of accidents (Fatal; injury - total and number resulting in property damage over \$100);  
Persons killed, injured (Detail).  
Accident ratios - per million vehicle miles based on estimated consumption of petroleum fuels on public roads.
2. Number of accidents:  
- by class; (Detail of: type of accident; month; day; hour of occurrence; road location; road surface; road condition; type of road; weather condition; place of occurrence (rural; urban, etc.)); by pedestrian action; by condition of pedestrian.
3. Number of victims, by age groups; (Detail of class of victim; sex; month of occurrence; place; type of accident.)



4. Number of pedestrians killed and injured;)
  - by condition of pedestrian; ) Annual only.
  - by action of pedestrian. )
5. Number of vehicles:
  - by class of accident;
  - by type of vehicle;
  - (Detail for condition of vehicle; model year of vehicle; direction of travel of vehicle).
6. Number of drivers:
  - by class of accident.
  - (Detail by sex; residence; condition of driver; by driving experience; by driver action; by age group).
7. Intersection accidents - number of victims: )
  - by class of victim; ) Annual
  - by road location; (Detail by hour; day of occurrence). ) only

Issue of 1958: 7 tables; 59 pages.

Issue of October - December 1959: 5 tables; 31 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

D.B.S. 53-002. Monthly. Price: \$1.00 per year.

D.B.S. 53-215. Annual. Price: 50¢.

#### PASSENGER BUS STATISTICS

Monthly: Intercity and rural Class I carriers only:

by each province and interprovincial:

- number of firms reporting;
- revenue passengers - regular; charter;
- revenue vehicle miles - regular; charter;
- fuel consumed - gallons gasoline; diesel oil;
- total revenue (\$).

Annual: Separate totals for Group I, II, III Motor Carriers





by provinces (Atlantic: Total only):

1. Number reporting.
2. Property account - cost of property, vehicles, etc.  
(Detail for Group I only); accrued depreciation reserve.
3. Operating revenues:
  - passenger revenues - regular and extra service,  
separately for intercity and rural; urban and suburban. Also chartered service (including school);
  - total mail, baggage, express, newspapers, etc.;
  - other.
4. Operating expenses, by type (more detail for Group I) - including operating taxes and licences;
  - other income; )
  - income taxes; ) Group I only
5. Traffic statistics:
  - passengers carried; ) separately for chartered and  
regular routes (intercity and
  - revenue vehicle miles; ) rural; urban and suburban)
  - fuel consumed - gallons gasoline; diesel oil.
6. Employees, by type:  
Average number employed; salaries.
7. Revenue equipment: number:
  - gasoline and diesel separately, by model year;
  - by seating capacity.
8. Taxes (by type, excluding income tax).
9. Accidents:
  - number of persons (by type) killed and injured.
  - number fatal; injury accidents;
  - number of accidents resulting in property damage over \$100.

10 tables; 17 pages.

Prepared in Transportation Section of the Public Finance  
and Transportation Division.



D.B.S. 66-001. Monthly.

TRAVEL BETWEEN CANADA AND THE UNITED STATES, May 1960.

Price: 20¢ per copy; \$2.00 per year.

1. Highway traffic at Canadian border - number of vehicles:
    - by ports, by provinces and Yukon; also vehicles transported by boat direct from U.S. - total only;
    - separately for foreign vehicles (breakdown for: length of stay 24 hours or less; over 24 hours; repeats and taxis; commercial vehicles); and Canadian vehicles (length of stay abroad 24 hours or less; over 24 hours; commercial vehicles).
  2. Travellers entering Canada from United States:
    - by provinces and Yukon;
    - separately for rail; bus; boat; plane;
    - separately for Canadian travellers; foreign travellers.
- 6 tables, 11 pages.

Prepared in International Trade Division: Balance of Payments Section. (see Exhibit 30).

D.B.S. 66-002. Monthly. Price: 10¢ per copy; \$1.00 per year.

VOLUME OF HIGHWAY TRAFFIC ENTERING CANADA ON TRAVELLERS' VEHICLE PERMITS, SEPTEMBER 1959.

"With this issue this publication is being temporarily discontinued because of the effects of a change in the procedure of the Department of National Revenue in dealing with the entry of non-resident vehicles. Publication is expected to be resumed when a new form of presentation is developed for showing comparable monthly statistics of traffic."

Data given are:

Number of vehicles entering Canada on travellers' vehicle permits:



- by province of entry and Yukon.

1 table; 1 page.

Prepared in International Trade Division: Balance of Payments  
Section.

D.B.S. 66-201. Annual. Price: \$1.00

TRAVEL BETWEEN CANADA AND OTHER COUNTRIES, 1958.

A. Contains a 70-page article entitled "Leading Developments in Travel between Canada and Other Countries". Analyzes characteristics of traffic crossing the Canadian-American border. The article contains 33 tables, copies of 11 questionnaires given to travellers sampled, and also 3 charts and 2 maps.

Principal data in these statistical tables:

1. Number and expenditures of U.S. travellers in Canada;
  - by auto (non-permit; customs permits; repeat trips);
  - rail; boat; through bus; plane; other.
2. Average declared expenditure per car of non-resident motorists travelling in Canada on customs permits:
  - by class of permit (commuter; summer resident; local; other);
  - by province of exit.
3. Number of non-resident one- and 2-day autos travelling on customs permits in transit between selected border points in Ontario.
4. Selected routes of non-resident automobiles (Detail).
5. Minimum interprovincial travel by non-resident automobiles (Detail).
6. Purpose of visit reported by U.S. motorists visiting Canada (detail). Same data for Canadians returning from U.S.
7. Accommodation used by motorists from U.S.; hotel or resort; motor court or motel; etc. (Detail).





8. Average mileage in Canada reported by motorists from U.S. by province of entry and province of destination, special survey, 1958.
  9. Expenditures of Canadian travellers in U.S., by type of transportation used to re-enter Canada:
    - auto; train; boat; bus (exclusive of local bus);
    - aeroplane; other.
  10. Number of non-immigrant visitors entering Canada direct from overseas; by aeroplane; by vessel:
    - by country of residence.
  11. Residents of Canada returning direct from overseas by chief ports of re-entry (detail).
  12. Purpose of visit reported by Canadians returning direct from overseas (%):
    - by aeroplane; by vessel.
- B. Additional statistical tables contain the following data:
1. Non-resident motorists travelling on customs permits who departed from Canada in 1958; also separately for Canadian automobiles returning to Canada in 1958:
 

By days' stay:

    - number of permits (or cars);
    - % of total permits (or cars);
    - average expenditure per car (\$);
    - estimated total expenditures (\$);
    - % of total expenditures for all visits;
    - number of car-days;
    - average expenditure per car per day;
    - average number of persons per car;
    - number of persons;
    - number of person-days;
    - average expenditure per person per day;



Also:(for non-residents only): By U.S. state of registration:

- entries on customs permits as % of automobile registrations;
- average declared expenditure per car;
- total expenditure;
- average length of visit;
- average expenditure per car per day.

2. Non-resident automobiles travelling on customs permits which departed from Canada in 1958:

- number of automobiles - by length of visit (1 day; 2 days; 3 days and over):
  - by port of entry and port of exit;
  - separately for 9 main regional categories - traffic within Ontario;
  - traffic from Ontario to other provinces; traffic Maritimes to other provinces; Manitoba to other provinces, etc.;
- number of automobiles - by U.S. state and by province of entry (Newfoundland, Prince Edward Island and Nova Scotia totalled; other provinces and Yukon separately);

Separate data for those remaining in Canada 3 days or over;

- average declared expenditure per car - by U.S. state and "total remaining states and foreign countries".

3. Canadian travellers returning to Canada in 1958:

By days' stay; separately via rail; via bus; via plane:

- number of persons;
- % of total persons;
- average expenditure per person;



- estimated expenditures;
- % of total expenditures;
- number of person-days;
- average expenditure per person per day.

(See Exhibit 31).

4. By each state of destination reported by Canadian visiting 48 hours or over:
  - % of total persons, by quarters of the year. Also by province of re-entry into Canada.
5. Number of foreign automobiles and other vehicles entering Canada:
  - separately for non-permit class - local traffic; travellers' vehicle permits; commercial vehicles;
  - by province of entry; also by month of entry.
6. Number of foreign travellers entering Canada from U.S.; also number of Canadians returning from U.S.;
  - by province of entry; also by month of entry;
  - separately by rail; boat; bus; aeroplane.
7. Number of Canadian automobiles and other vehicles travelling in U.S.:
  - by province of re-entry into Canada;
  - also by month;
  - separately for length of stay - 24 hours or less; over 24 hours; commercial vehicles.

56 tables; 3 charts; 2 maps; 11 forms; 100 pages.

Prepared in International Trade Division: Balance of Payments Section. (see Exhibit 31).

D.B.S. 53-201. Annual. Price: 50¢.

ROAD AND STREET MILEAGE AND EXPENDITURE, 1958 (formerly HIGHWAY STATISTICS)

For each province and territory:





1. Per capita highway and rural road expenditure;
  2. Highway and rural road expenditure;
    - total; federal; provincial; municipal expenditures;  
breakdown for construction; maintenance; administration  
and general;
    - net subsidies and grants in aid.
  3. Revenue earned by:
    - domestic toll bridges, tunnels and ferries;
    - controlled access toll highways.
  4. Urban street expenditure:
    - number of authorities;
    - expenditure detail for: construction; maintenance;  
administration. Separately for roadways; bridges and  
ferries; sidewalks and footpaths;
    - subsidies paid; received.
  5. Trans-Canada Highway expenditure;
    - total; federal expenditure; grants to provinces.
  6. Expenditure for elimination and protection of grade  
crossings:
    - by railways; from Railway Grade Crossing Fund; by  
provinces and municipalities.
  7. Highway and rural road mileage, by type of surface;  
Also: average number of motor vehicles per mile of surfaced  
road - total Canada only.
  8. Urban street mileage:
    - by type of pavement.
- 10 tables; 15 pages.

Prepared in Transportation Section of the Public Finance and  
Transportation Division. (see Exhibit 32).







- lease of transit property - rent; income;
- other income;
- interest, etc.;
- provision for income tax.

3. Traffic statistics:

Separately by class of equipment - electric car;  
trolley coach; motor bus; subway car; chartered:

- revenue passengers;
- revenue vehicle miles;
- seat miles available;
- route miles one way;
- revenue vehicle hours.

4. Revenue equipment - number:

Separately by class of equipment - electric cars;  
trolley coaches; motor buses; subway cars:

Also: for total all companies only:

- number, by seating capacity.

5. Fuel- gallons - gasoline; diesel oil; liquefied  
petroleum gas.

6. Employees - number; salaries.

By type of employee.

7. Number of accidents - for total all companies only:

- by class of equipment - electric car; trolley  
coach; motor bus; other;
- by type of accident;

Persons killed; injured - by type of person;

- by cause of accident;
- by class of equipment involved.

8. Fares charged (detail) - for each of 13 major urban  
transit systems only.





B. For urban transit operations of intercity and rural passenger carriers:

- passenger revenue;
- revenue vehicle-miles run;
- revenue passengers carried.

18 tables; 20 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (See Exhibits 34, 35, 36.)

#### 4. WATER

D.B.S. 54-002. Monthly. Price: \$2.00 per year.

#### SHIPPING STATISTICS, February 1960.

1. Cargoes unloaded, also loaded at: Atlantic and St. Lawrence River ports, Montreal and below; Great Lakes and St. Lawrence ports above Montreal; Pacific ports: (tons)
  - for foreign countries; for each of 17 commodities;
  - in coastwise shipping; for each of 13 commodities.
2. Number and registered net tonnage of vessels arrived at, also departed from, selected Canadian ports:
  - in foreign service; for each of 26 ports, also totals for: Atlantic and St. Lawrence River ports, Montreal and below; Great Lakes and St. Lawrence ports above Montreal; Pacific ports.
  - in coastwise shipping; for each of 26 ports.
3. Cargoes unloaded, loaded in foreign, also coastwise, shipping at each of 26 selected Canadian ports by commodities (a few commodities for each port).

6 tables; 8 pages.



D.B.S. 54-202. Annual. Price: \$1.50.

SHIPPING REPORT, 1958 PART I: INTERNATIONAL SEABORNE SHIPPING

1. Cargoes loaded (tons) at Canadian ports:
  - for each foreign country;
  - by registry of vessel;
  - separately for: total Atlantic and Lower St. Lawrence ports, Montreal and below; Great Lakes and Upper St. Lawrence ports above Montreal; Pacific ports;
  - separately for each commodity.

(see Exhibit 37).

Totals for each commodity also given; classified by port areas in Canada.

2. Cargoes unloaded (tons) at Canadian ports:
 

(Same detail as in 1.)
3. Number and registered net tonnage, also tons of cargo carried, by vessels arrived at, also departed from, Canadian ports in international shipping:
  - separately for: total Atlantic and Lower St. Lawrence ports, Montreal and below; Great Lakes and Upper St. Lawrence ports above Montreal; Pacific ports;
  - separately for each country.

(See Exhibit 38).

5 tables; 1 chart; 103 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (See Exhibit 37 and 38).

D.B.S. 54-203. Annual. Price: 75¢.

SHIPPING REPORT, 1958 PART II: INTERNATIONAL SEABORNE SHIPPING

1. Cargoes (tons) loaded, also unloaded, from foreign countries:
  - at each port (by provinces and Northwest Territories);



- by commodities (a few commodities and "general cargo" for each port).
2. Number and registered net tonnage of vessels departed from Canadian ports in international seaborne shipping:
    - by rig (steam; motor; sail; unriggered);
    - by size group (registered net tons);
    - by provinces and Northwest Territories.
  3. Number and registered net tonnage of vessels arrived at, also departed from, Canadian ports in international shipping:
    - at each port (by provinces and Northwest Territories).
  4. Number of vessels; registered net tonnage; cargo unloaded or loaded in respect to cargo shipped to and from foreign countries via the St. Lawrence River:
    - at each Great Lakes port;
    - by commodities (a few commodities and "general cargo" for each port).
  5. Number and gross tonnage of tugs and number and registered net tonnage of fishing vessels departed from Canadian ports in international seaborne shipping:
    - from each port (by provinces).

10 tables; 171 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

D.B.S. 54-204. Annual. Price: 75¢.

#### SHIPPING REPORT, 1958 PART III: COASTWISE SHIPPING

1. Cargoes loaded, also unloaded, at Canadian ports in coastwise shipping:
  - for each port (by provinces and Northwest Territories);
  - by commodities and "general cargo".

(See Exhibit 39).





Totals for each commodity also given; classified by port areas in Canada.

2. Number and registered net tonnage of vessels arrived at, also departed from, Canadian ports in coastwise shipping:
  - for each port (by provinces, and Northwest Territories).
3. Number and registered net tonnage of vessels departed from Canadian ports in coastwise shipping:
  - by rig (steam; motor; sail; unriggered);
  - by size group (registered net tonns);
  - by provinces and Northwest Territories.
4. Number and gross tonnage of tugs and number and registered net tonnage of fishing vessels departed from Canadian ports in coastwise shipping:
  - at each port (by provinces and Northwest Territories).
5. Tonnage of cargo unloaded at Canadian ports in inter-provincial and intraprovincial trade:
  - by province of loading and province of unloading.

(See Exhibit 40).
6. Cargo loaded and unloaded (tons) in coastwise shipping by vessels of foreign registry; number of vessels; registered net tonnage;
  - by country of registry;
  - separate totals for: Atlantic and Lower St. Lawrence River ports; Great Lakes ports; Pacific ports.

(See Exhibit 40). 18 pages; 270 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (see Exhibits 39 and 40).

D.B.S. 54-205. Annual. Price: 50¢.



WATER TRANSPORTATION, 1958.

Vessels operated by 358 Canadian-owned companies.

Includes vessels of C.N.R. Newfoundland Coastal Steamship Service.

Excludes vessels used solely by industrial companies for transportation of own cargoes.

All following data are given separately for:

- each division- Atlantic; Pacific; Great Lakes; Inland;
  - incorporated companies; individual ownership and partnership.
1. Property account: (\$)  
 - land; vessels; docks; wharves and warehouses; accrued depreciation; etc.
  2. Income Account: Operating Revenues (passenger; freight; towing; salvage; storage; charter);  
 Operating expenses (maintenance; operation; taxes; income tax; etc.)  
 Other income; Other expenses.
  3. Employees - number and salaries:  
 - separately for vessel crews; dock and warehouse; office administration; other employees.
  4. Fuel - quantity and cost:  
 - coal; fuel oil; diesel oil; gasoline.
  5. Vessels, owned or chartered, in operation during and at the end of season by Canadian marine operators; also owned vessels not operated;  
 - separately for passenger; passenger and freight; tanker; tugs; tow barges and scows; miscellaneous.
  6. Number of persons killed; injured in Canadian water transportation industry:  
 - by type of person;  
 vessels lost- number and value.



9 tables; 11 pages.

Prepared in Transportation Section of Public Finance and  
Transportation Division. (see Exhibit 41).

D.B.S. 54-001. Monthly. Price: \$1.00 per year.

SUMMARY OF CANAL STATISTICS, December 1959

1. Following data are given:

- number of vessel passages;
- registered net tonnage of vessels;
- number of passengers;
- number of pleasure craft;
- tons of freight;

with following breakdown:

- for each of 11 Canadian canals;
- by direction of traffic for each of: Sault Ste.  
Marie; Welland; St. Lawrence canals;
- separately for Canadian lock; Canadian and U.S.  
locks of the Sault Ste. Marie canal.

2. Tons of freight - by commodities:

- for Sault Ste. Marie canal - Canadian lock; Canadian  
and U.S. lock; separately for eastbound and westbound;
- for Welland canal and for St. Lawrence canals -  
separately for bulk; general; also separately for  
eastbound; westbound.

2 tables; 3 pages.

Prepared in Transportation Section of Public Finance and  
Transportation Division.

D.B.S. 54-201. Annual. Price: 75¢.

CANAL STATISTICS, 1958





Graphs:

- total freight traffic through Canadian canals  
1940-58 (tons);
- freight traffic through Welland; St. Lawrence; Sault  
Ste. Marie canals, 1940-58 (tons);
- vessel traffic through Welland; St. Lawrence; Sault  
Ste. Marie canals 1940-58 (thousands of vessels).

Statistical tables:

1. For each of 11 Canadian canals:

- number of vessels (Canadian; U.S.; U.K.; other);
- passengers;
- registered net tonnage - by rig; also breakdown by  
Canadian; U.S.; U.K.; other;
- cargo tons - by commodities - breakdown of some by  
direction of traffic;

Also: cargo tons up; down and cargo tons by country of  
loading and unloading (Canada; U.S.; U.K.; other).

2. Cargo tons carried in interlake traffic (lake of  
origin and destination).

3. Number of vessels upbound; downbound through St.  
Lawrence canals to or from outside points;

Also: number of tons cargo carried up; down St. Lawrence  
canals to or from outside points;

(see Exhibit 42).

4. Number of bushels of grain (by commodity) downbound  
through Welland canal between Canadian and U.S.  
ports:

- by country of origin of vessel;
- by country of registry of vessel;
- separately for Canadian and American grain.

(See Exhibit 42).



5. Freight carried (tons) through St. Lawrence canals:

- by country of registry or vessel (Canada; U.S.; U.K.; other);
- separately for cargo of U.S.; Canadian; and several other countries' origin - breakdown into up; down.  
(see Exhibit 42).

Similar tables for Welland and for Sault Ste. Marie canals.

6. Number and registered net tonnage of vessels using each canal by origin and destination of vessel; by country of registry; by rig;

- by direction up or down.

7. Number and registered net tonnage of vessels using Welland; Sault Ste. Marie; St. Lawrence canals by kind of vessel (freight; passenger; freight and passenger; tanker; scow or barge; other):

- by length; also by draft;
- by direction, up or down.

8. Traffic through Canadian and U.S. Sault Ste. Marie canals:

- cargo tons, by commodity;
- vessel passages;
- registered net tonnage of vessels;
- passengers;

Breakdown:

- by direction, up or down;
- Canadian canal; U.S. canal.

9. Freight (tons) carried through each canal by country of loading and unloading of cargo:

- by commodities;
- by direction, up or down.



10. Number of passengers carried through each canal:
  - by country of origin and country of destination;
  - by direction, up or down.
11. Number of pleasure craft lockages, each canal.
12. Length of season of navigation for each canal.
13. Location and description of canals; length; number and dimensions of locks.
14. Water freight charges on the Great Lakes:
  - Fort William-Port Arthur to various ports, for wheat; barley and oats; flax and rye; by months:
    - average charge per bushel;
    - average charge per ton;
    - average charge per ton-mile.

(See Exhibit 43).

32 main tables; 3 charts; 51 pages.

Prepared in Transportation Section of Public Finance and Transportation Division. (See Exhibits 42 and 43).

ST. LAWRENCE SEAWAY: PRELIMINARY TOLL TRAFFIC STATISTICS,

April 1960. Monthly. (No price listed)

Separately for each of 2 sections (Montreal - Lake Ontario; Welland) and for direction of traffic, up or down:

- number of transits;
- bulk cargo;
- general cargo;
- total cargo.

One page; one table.

Prepared by the St. Lawrence Seaway Authority.

(Mimeographed).





TRAFFIC REPORT OF THE ST. LAWRENCE SEAWAY, 1959. Price: 50¢.

Prepared for the St. Lawrence Seaway Authority and  
the St. Lawrence Seaway Development Corporation, Cornwall, Ontario.

A. For St. Lawrence Seaway, separately for each section:

Montreal - Lake Ontario; Welland Canal:

1. Data on traffic, etc. are broken down as follows:

- by direction, up or down;
- by type of vessel (cargo; cargo with passengers; scow  
or barge; tanker; tug; pleasure craft; other);  
separately by origin of cargo - Canada; U.S.;  
foreign;

(See Exhibit 44).

Also by type of cargo (bulk; general; mixed; passengers;  
in ballast - ocean, laker, pleasure, other).

The data given in this breakdown are:

- number of transits;
- net tons;
- gross tons;
- cargo tons;
- passengers;
- toll revenue;
- % of total toll revenue.

2. By origin and destination of transit (Canada; U.S.;  
foreign); separately by direction, up or down.

The following data are given:

- number of transits;
- gross tons;
- toll revenue.

3. Cargo tons:

- by origin and destination (Canada; U.S.; foreign);
- by type - bulk; general;
- by direction, up or down.



4. For each class (ocean; laker):

And for each type of vessel (cargo; etc.); also for each class of cargo (bulk; general; mixed; in ballast) and pleasure craft and other.

The following data are given:

- number of transits;
- gross tons;
- cargo tons;
- toll revenue;
- average revenue per transit.

5. By length of vessel;

Also by size of vessel in gross tons;

Also by country of registry.

With breakdown by direction, up or down, the following data are given:

- number of transits;
- net tons (for length of vessel, but not for size or registry);
- gross tons;
- cargo tons (for country of registry; breakdown by type of cargo - bulk; general; mixed);
- toll revenue.

6. Cargo tons - by commodities and "general and mixed cargo"; "package freight - domestic"; "package freight - foreign":

- by type of cargo (bulk; general);
  - also by country of origin and destination (Canada; U.S.; foreign); separately by direction, up or down.
- (See Exhibit 45).



B. Total seaway traffic:

1. Cargo tons - by type of cargo (bulk; general):
  - through each of 24 Canadian ports and "Other Canadian ports", separately for inbound; outbound;
  - also through each of 15 U.S. ports and "Other United States ports", separately for inbound; outbound.
2. Vessel transits through: Iroquois Lock; Lock 8 - Welland:
  - for each day of navigation season;
  - by direction, up or down.
3. Cargo tons all traffic; also toll traffic (cargo tons; passengers); by months; separately by direction, up or down:
  - for Montreal - Lake Ontario section;
  - for Welland Canal section.
4. Non-toll traffic:

Separately for Montreal - Lake Ontario section;  
Welland Canal; Sault Ste. Marie (Canadian); Lachine;  
Cornwall Canal:

  - by type of vessel:
    - number of transits;
    - net tons;
    - gross tons;
    - cargo tons;
    - passengers (Sault Ste. Marie (Canadian);  
Lachine Canal only;)

By commodity and "general and mixed cargo", "package freight-domestic", "package freight - foreign", and  
by type of cargo (bulk; general):





- for Sault Ste. Marie (Canada); Lachine; Cornwall  
canals only:

- cargo tons.

(See Exhibit 46).

42 tables; 46 pages.

Prepared by the St. Lawrence Seaway Authority.

(See Exhibits 44, 45, 46).

ANNUAL REPORT OF THE NATIONAL HARBOURS BOARD - For Calendar Year 1959

Price: 25¢.

This publication is produced by the National Harbours Board. Although annual reports of government agencies are generally omitted from this Appendix (which describes only statistical periodicals relating to transport), this report contains so much statistical material bearing directly on water transport as to merit inclusion.

Numerous financial and statistical tables appear in this report. Some appear in the text, while others are financial statements of the National Harbours Board which follow the text. In addition there is a section of tables dealing with specific ports, bridges, and elevators.

Statistical material in the text of the report includes:

1. Number of vessels arriving; departing, and registered net tonnage, 1955 to 1959.
2. Cargo tonnage inward, also outward, by foreign ships; domestic ships - 1955 to 1959.
3. Comparative consolidated income statement of the National Harbours Board.
4. Operating income; operating expense; net operating income for each of several ports and the Jacques Cartier bridge, 1955 to 1959.
5. Capital expenditures at each of several ports, etc.
6. Amounts required from the Government and paid to the Government.



Following the text is a balance sheet and a statement of income and expense of the National Harbours Board.

At the end of the text, the following statistical and financial data are given (where applicable) for each of: Ports of Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Vancouver; Jacques Cartier Bridge; Prescott elevator; Port Colborne elevator:

1. Number of vessels and net registered tonnage:  
arrivals; departures. Separately for deep sea  
or ocean-going commercial; coastal or inland  
commercial vessels, including fishery; other.
2. Cargo tonnage inward; outward - by commodities.
3. Passengers landed; embarked - separately for  
foreign; coastwise.
4. Grain elevator; receipts (bushels); shipments -  
separately via rail; water; other.
5. Balance sheet.
6. Statement of income and expense.

National Harbours Board.

(See Exhibit 47).

## 5. AIR

D.B.S. 51-001. Monthly. Price: \$2.00 per year.

### CIVIL AVIATION, December 1959.

1. Separately for: Canadian carriers domestic scheduled -  
Total and also each of 6 carriers; Total domestic non-  
scheduled; Total trans-border; Atlantic and Pacific  
services - Total; Trans-Canada; Canadian Pacific; and  
Foreign carriers (trans-border; Atlantic and Pacific  
services). Also: Non-scheduled domestic - Total;  
Class "B" carriers; Class "C"; Class "Y" carriers:



The following data are given:

- miles scheduled;
- non-revenue miles flown (for each of 6 Canadian scheduled carriers only);
- revenue miles flown - unit toll; bulk;
- hours flown - non-revenue; revenue - unit toll; bulk; other;
- fuel - gallons; cost - separately for: turbo fuel; gasoline; also oil - turbo aircraft; other aircraft;
- average number of employees; salaries and wages;
- average number of aircraft - owned; leased;
- ratio of miles flown to miles scheduled (where applicable);
- revenue passenger load factor - scheduled;
- revenue passengers carried - unit toll; bulk;
- passenger-miles unit toll; revenue; non-revenue;
- freight carried: non-revenue; revenue - unit toll; bulk;
- ton-miles freight unit toll: revenue - non-revenue;
- express carried (lb.) unit toll;
- express ton-miles unit toll;
- excess baggage (lb.) unit toll;
- excess baggage ton-miles unit toll;
- mail carried (lb.) unit toll;
- mail ton-miles unit toll.

2. For each of 6 scheduled Canadian carriers; for non-scheduled Class "B"; "C"; "D" carriers; for Atlantic and Pacific services - Trans-Canada; Canadian Pacific: the following additional data are given:

- revenue passengers carried scheduled (originated; domestic interline; foreign interline; division interline);





- revenue passengers - non-scheduled;
  - revenue freight carried scheduled (originated; etc.);
  - revenue freight non-scheduled unit toll;
  - revenue express carried scheduled (originated; etc.);
  - express - non-scheduled;
  - revenue excess baggage carried (originated; etc.);
  - excess baggage - non-scheduled;
  - available seat miles - scheduled;
  - available ton-miles - scheduled;
3. For Canadian carriers total scheduled; total non-scheduled; for each of 6 scheduled Canadian carriers' domestic services; for non-scheduled carriers' domestic services - Class "B"; Class "C" carriers:
- operating revenues: Unit toll (passenger; mail; freight; express; excess baggage); bulk; other flying services; non-flying services;
  - operating expenses: Aircraft operation and maintenance; ground operation and maintenance; traffic; general administration;
  - general taxes; income taxes;
  - operating ratio.
- 11 tables; 2 graphs; 15 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 48).

D.B.S. 51-201. Annual. Price: 50¢.

CIVIL AVIATION: PRELIMINARY ANNUAL, 1958.

Statistics are identical with those in D.B.S. 51-001 Civil Aviation, December 1959 (monthly) except that in the annual publication they are on an annual basis. Also where 6 Canadian scheduled carriers appear individually in the monthly publication, 7 appear in the annual edition (Austin Airways added).



14 tables; 13 pages; 2 graphs.

Prepared in Transportation Section of the Public Finance and Transportation Division.

D.B.S. 51-202. Annual. Price: 50¢.

CIVIL AVIATION, 1958.

All of the statistics which appear in the monthly (D.B.S. 51-001) and preliminary annual (D.B.S. 51-201) editions of Civil Aviation are also included on an annual basis in this publication.

There is also the following additional data:

1. For Canadian scheduled carriers - Total; each of 7;  
also non-scheduled Canadian carriers - Total;  
Class "B"; "C"; "D" carriers:  
- balance sheet:
  - current assets;
  - investments; deferred debt; special funds;  
(scheduled only);
  - fixed assets less depreciation;
  - current liabilities;
  - long-term debt; deferred credits; reserves;  
(Scheduled only);
  - capital stock;
  - surplus;
  - property account (omits Total - non-scheduled;  
Class "C" and "D" carriers):
    - property and equipment (detail);
    - additions, retirements, depreciation  
(detail);
  - statement of earned surplus (omits Total non-scheduled; Class "C" and "D" carriers).



2. Employees; salaries and wages;
    - by type of employee, for total Canadian and foreign air carriers;
    - for each of 7 scheduled carriers; Class "B"; "C"; "D" carriers; foreign carriers (trans-border; Atlantic and Pacific services).
  3. Accidents involving Canadian air carriers:
    - number of casualties - fatal; serious; minor - by type of person;
    - number of accidents - by operational phase; also by type of flying;
    - % of total accidents - by probable cause.
  4. Personnel licences (by type); aircraft registered (by type); airport licences; number in force December 31, 1957 and December 31, 1958.
- 19 tables; 4 charts; 18 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

Air Transport Board.

ORIGIN AND DESTINATION STATISTICS: MAINLINE SCHEDULED TRAFFIC SURVEY OF REVENUE PASSENGERS, 1955-1959 (No price listed - not for general sale)

Scheduled passenger traffic between points in Canada, and between Canadian and U.S. points (Canadian carriers only) - 4 weeks' sample, March 17 to 31 and September 1 to 14 in each of five years. Sample taken from first ticket lifted by participating carriers (Trans-Canada Air Lines and Canadian Pacific Air Lines). Sample not blown up to an annual basis, but data are shown separately for March and September of each year:

- number of passengers between Canadian stations,





origin and destination, domestic traffic;

- number of passengers between Canadian stations and

T.C.A. terminal points in U.S., origin and destination.

Prepared by the Statistics Section of the Economics  
Division, Air Transport Board.

3 parts, tables not numbered, 186 pages.

(See Exhibit 49).

## 6. PIPELINES

D.B.S. 55-001. Monthly.

OIL PIPE LINE TRANSPORT, April 1960. Price: \$2.00 per year.

1. Oil (barrels) carried by pipelines, separately for  
trunk and gathering lines;

- received: - own gathering system;

- other pipelines - gathering; trunk;

- originating on own trunk lines;

- received from foreign pipeline connections;

- received from other carriers (total rail and  
truck);

- delivered: - to other Canadian trunk lines;

- terminated on own trunk lines;

- delivered to foreign pipeline connections;

- delivered to other carriers (total truck, rail  
and water).

2. Oil (barrels) carried by pipelines, separately for  
gathering; trunk;

- by province in which shipments originated;

Also, oil delivered, separately for gathering; trunk  
lines, by province in which shipment terminated or  
was delivered to other carriers.



3. For each of 5 pipelines and "other pipelines":

- traffic - total barrels oil received into;  
delivered out of system;
  - barrels handled, daily average - gathering  
lines; trunk lines;
  - barrel-miles - trunk lines;
  - average miles per barrel (trunk lines);
  - operating revenues - quarterly;
  - number of employees; salaries and wages;
  - man-hours worked by wage earners.
- 6 tables; 2 charts.

Prepared in Transportation Section of the Public  
Finance and Transportation Division.

D.B.S. 55-201. Annual.

OIL PIPE LINE TRANSPORT, 1958. Price: 50¢.

1. For total all companies:

Oil (barrels) carried by pipelines, separately for  
trunk and gathering lines:

- Received: - own gathering system;
  - other pipelines - gathering; trunk;
  - originating on own trunk lines;
  - received from foreign pipeline connections;
  - received from other carriers (total rail  
and truck);
- Delivered:- to other Canadian trunk lines;
  - terminated on own trunk lines;
  - delivered to foreign pipeline connections;
  - delivered to other carriers (total truck,  
rail and water).



2. For total all companies:

Oil (barrels) carried by pipelines, separately for gathering; trunk:

- by province in which shipments originated;

Also, oil delivered, separately for gathering;

trunk lines, by province in which shipment

terminated or was delivered to other carriers.

3. For total all companies:

Oil carried by pipelines by month in which shipment originated, separately for gathering; trunk lines.

4. For each of 23 companies:

- barrel-miles transported by trunk lines.

5. For each of 20 companies:

- mileage of gathering system;

- barrels handled, daily average;

- barrel-miles during year;

- pumping stations on trunk lines, by rated horsepower.

6. For each of 32 companies:

- oil pipeline fill (barrels), separately for gathering; trunk lines;

- oil pipeline mileage, separately for gathering; trunk lines, by province; also by pipe diameter (inside) in inches.

7. For total all companies and for each of 32 companies:

- assets (detail);

- liabilities (detail);

- property account (detail);

- operating revenue - from gathering; trunk line operations; other;

- other income;

- operating expenses - maintenance; transportation; general office; other;





- other expenses; depreciation; interest;
- income tax.

8. Average number of employees and total earnings:

- by general office; clerical; supervisory and occupational; wage earners;
- by provinces.

22 tables; 1 chart; 20 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division. (see Exhibit 50).

D.B.S. 55-002. Monthly. Price: \$2.00 per year.

GAS PIPE LINE TRANSPORT, May 1960.

For each of 16 natural gas transmission companies:

1. Natural gas received into system: (thousand cubic feet)

- from each source: own gathering systems; other gathering systems; foreign transmission lines; Canadian transmission lines; storage;

Also: Natural gas delivered out of system:

- to each of: distribution systems; foreign transmission lines; industrial users; others; Canadian transmission lines; storage.

2. Pipeline fuel;

Pipeline losses and metering differences;  
Line pack fluctuations.

3. Send-out; daily average; peak day of month.

4. Total operating revenue.

8 pages; 1 chart; 3 tables.

Prepared in Public Utilities Section of Public Finance and Transportation Division.



7. WAREHOUSE AND STORAGE

D.B.S. 63-212. Annual. Price: 50¢.

WAREHOUSING, 1958.

Data for 213 firms offering public warehousing and storage. Firms included in "Warehousing" or "Motor Carriers - Freight" according to predominant source of revenue.

1. Totals, by provinces:
  - number of companies reporting;
  - property account - land; warehouses, garages, etc.; trucks, trailers, service cars, and other vehicles; etc.;
  - operating revenue - storage revenue (household goods; dry merchandise; refrigerated storage); cartage - railway and other local; handling and extra labour service; local moving; other revenue;
  - operating expenses - wages; gasoline, oil and grease; operating taxes and licences; etc.
2. Number of employees; salaries; wages (regular; casual); withdrawals by owners or working partners:
  - by provinces.
3. Storage facilities:
  - net occupiable space in cubic feet in owned; leased warehouses;
  - by type of storage (household goods; dry merchandise; refrigerated);
  - by provinces.
4. Trucking equipment:

Number of trucks; semi-trailers; trailers:

  - by capacity in tons;
  - by province.



5. Separately for motor carriers firms; warehousing firms:

- storage revenue (household goods; dry merchandise; refrigerated);
- storage facilities (cu. ft.) (household; dry merchandise; refrigerated).

6 tables; 12 pages.

Prepared in Transportation Section of the Public Finance and Transportation Division.

D.B.S. 22-004. Weekly. Price: \$3.00 per year.

GRAIN STATISTICS WEEKLY, July 13, 1960.

1. Visible supplies of Canadian wheat; also oats; barley; rye flaxseed:
  - at country elevators; various ports; in transit - lake; in transit - rail; (total; also western division); etc.
2. Canadian eastern grain; also United States and other foreign grain:
  - in store eastern elevators.
3. Stocks in store, by principal grades, at public and semi-public terminals; also at eastern elevators.
4. Stocks; receipts; shipments, by type of grain:
  - country elevators;
  - Fort William - Port Arthur.
5. Overseas exports of Canadian grain, by ports of loading.
6. Lake shipments from Fort William - Port Arthur:
  - by type of grain;
  - also by region of destination (Maritime ports; overseas direct; Georgian Bay and Upper Lake ports; etc.).

24 pages.

Prepared in the Crops Section of the Agriculture Division.





D.B.S. 22-005. Monthly. Price: \$3.00 per year.

THE WHEAT REVIEW, June 1960.

1. Lake shipments of Canadian grain, by type (bushels).
2. Visible supply of Canadian wheat at country elevators;  
in transit - lake; in transit - rail; various ports;  
etc.
3. Wheat shipments to United States by vessel by  
destination; also by rail; rail shipments of wheat  
from Bay, Lake and Upper St. Lawrence ports, by port  
of origin of shipment; rail shipments of wheat from  
Fort William - Port Arthur, monthly; distribution  
of rail shipments from Fort William - Port Arthur to  
Ontario; Quebec - by grade.
4. Overseas exports of Canadian grain by ports of loading,  
by type of grain.
5. Distribution of wheat shipments (also millfeed shipments)  
under the freight assistance policy, by province, by  
month.

33 pages.

Prepared in the Crops Section of the Agriculture

Division.

D.B.S. 22-001. Quarterly. Price: \$2.00 per year.

COARSE GRAINS QUARTERLY, May 1960

1. Visible supply of Canadian oats; also Canadian barley;  
rye; flaxseed:  
- at country elevators; in transit-lake; in transit -  
rail (total; also western division; eastern division);  
interior terminals; various ports; etc.
2. Lake shipments from Fort William - Port Arthur of  
Canadian grain, by type, (bushels)- annually; also



rail shipments from Fort William - Port Arthur, by type, monthly;

3. Freight assistance shipments of wheat; oats; barley; rye; screenings; millfeeds; by province.

29 pages.

Prepared in the Crops Section of the Agriculture Division.

D.B.S. 22-201. Annual. Price: \$1.50

GRAIN TRADE OF CANADA 1957-58.

Principal detail is as follows, separately for each type of grain, in bushels:

1. Primary net receipts and shipments at country elevators:
  - by crop district.
2. Car-lot receipts; primary truck lot receipts, at private terminal and mill elevators in western division.
 

(See Exhibit 51).
3. Primary shipments forwarded by rail from country elevators; also from private terminal and mill elevators:
  - to Lakehead; eastern elevators; Pacific seaboard; Churchill; interior; etc.
  - also to Canadian points - eastern; western division; U.S. points;
  - also exported overseas.

(See Exhibit 51).
4. Terminal elevators, Fort William - Port Arthur:
  - primary net receipts:
    - by months;
    - by lake; rail;
  - also: distribution of primary shipments:
    - transfers by vessel to eastern elevators; U.S. points;



- transfers by rail to eastern elevators;
- domestic shipments to Canadian points; eastern division - by vessel; rail;
- overseas.

Also: detail for shipments of screenings by vessel; rail.

5. Terminal elevators at each of: Vancouver-New Westminster; Victoria; Prince Rupert; Pacific Coast; Churchill; North Transcona:
  - primary net shipments - by ocean; rail (Canadian; U.S. points);

Also detail for shipments of screenings.
6. Primary net shipments from Canadian Government interior semi-public terminal elevators:
  - forwarded by rail to Lakehead; Churchill; etc.
  - domestic shipments by rail to Canadian points - eastern; western division;
  - weigh and reload, by rail to Lakehead; etc.
7. Dockage:
  - on car receipts of Canadian grain at various points;
  - on lake shipments of flaxseed and buckwheat from Fort William - Port Arthur.
8. Rail shipments of grain, separately for C.N.R.; C.P.R., by months:
  - unloaded at Vancouver - New Westminster; Victoria; Prince Rupert; interior elevators; North Transcona; Churchill.
9. Lake shipments of Canadian grain and screenings from Fort William - Port Arthur:
  - to each of 15 Canadian ports;
  - to each of 7 U.S. ports;
  - also by nationality of vessel (Canadian; U.S.; foreign).
10. Detail of receipts and shipments (also: handlings) of Canadian grain at eastern elevators:
  - by origin (Western Canada; eastern country points; U.S. etc.) and by destination (Lower Lake and Upper St. Lawrence ports; Georgian Bay and Upper Lake ports; Lower St. Lawrence ports; Maritime ports);





- by vessel; rail.

(See Exhibit 52).

Same detail for total U.S. and foreign grain.

11. Visible supplies of Canadian grain in store, by weeks:

- at western country elevators; etc;
- in transit, rail - western and eastern division;
- in transit - lake.

12. Detail of Canadian grain exports:

- by seaboard sector (via Churchill; via Fort William - Port Arthur direct; etc.);

Also detail for countries of final destination.

13. Stocks of Canadian grain at commencement of crop year:

- on farms; Pacific Coast elevators; etc.; in transit - rail; in transit - lake.

14. Grain storage capacity - detail by area.

15. Freight rates (¢ per 100 lbs., carload shipments);

and corresponding distances (miles);

Rail rates on grain; grain products; flaxseed; flaxseed products:

- to Fort William - Port Arthur from individual points in Manitoba, Alberta, Saskatchewan;
- to Vancouver; Prince Rupert; Churchill for export - from individual points in Prairies;
- from Fort William to 6 eastern stations, for export;
- "Ex-Lake" from 3 Georgian Bay and Lower Lake ports to 5 eastern stations, for export;
- from Montreal to 3 eastern stations, for export;
- for local delivery, to Vancouver; to Prince Rupert, from individual stations in Prairie Provinces;
- "Ex-Lake" from Goderich; Midland; Port Colborne; Port McNicoll; Montreal; Fort William-Port Arthur; for local delivery to destinations in Ontario; Quebec; Nova Scotia; New Brunswick;



- from Fort William - Port Arthur to 14 stations in eastern U.S., for local delivery;

Lake freight rates on Canadian grain (¢ per bushel);  
by months:

- from Fort William - Port Arthur to Georgian Bay ports;  
Port Colborne; Buffalo; Montreal;
- from Port Colborne to Montreal;

Weighted average rates from Fort William - Port Arthur:

- to various ports of discharge by various routes;
- separately for wheat; oats; barley; rye; flaxseed.

144 tables; 120 pages.

Prepared by the Crops Section of the Agriculture Division of Dominion Bureau of Statistics and by the Board of Grain Commissioners for Canada, Statistics Branch.

(See Exhibits 51, 52).

#### 8. TRANSPORTATION EQUIPMENT

D.B.S. 42-201. Annual.

#### TRANSPORTATION EQUIPMENT, 1957 GENERAL REVIEW.

Dated June 1959.

Prepared in the Industry and Merchandising Division.

Price: 50¢.

Standard Industrial Classification used by Dominion Bureau of Statistics provides for a separate Transportation Equipment group. This group includes the following industries: aircraft, shipbuilding; bicycles; boat building; motor vehicles; motor vehicle parts; railway rolling stock; miscellaneous. There is a separate publication for each of these industries as well as this general review.

1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the laws of quantum mechanics are based on the principle of the conservation of energy.

2. The second part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of matter. It is shown that the theory of the structure of the atom can be used to explain the properties of matter, such as its electrical conductivity, its magnetic properties, and its optical properties.

3. The third part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of the nucleus. It is shown that the theory of the structure of the atom can be used to explain the properties of the nucleus, such as its stability, its size, and its energy.

4. The fourth part of the paper is devoted to a discussion of the application of the theory of the structure of the atom to the study of the properties of the elementary particles. It is shown that the theory of the structure of the atom can be used to explain the properties of the elementary particles, such as their mass, their charge, and their spin. It is also shown that the theory of the structure of the atom can be used to explain the properties of the elementary particles, such as their interactions with each other and with the fields.

These publications are:

Rail

D.B.S. 42-211. Annual.

The Railway Rolling Stock Industry, 1958.

October 1959. 50¢.

Road

D.B.S. 42-209. Annual.

The Motor Vehicles Industry, 1958.

September 1959. 50¢.

D.B.S. 42-210. Annual.

The Motor Vehicle Parts Industry, 1956.

50¢.

D.B.S. 42-204. Annual.

The Bicycle Manufacturing Industry, 1958.

September 1959. 25¢.

Water

D.B.S. 42-206. Annual.

The Shipbuilding Industry, 1958.

March 1960. 25¢.

D.B.S. 42-205. Annual.

The Boat Building Industry, 1958.

March 1960. 50¢.

Air

D.B.S. 42-203. Annual.

The Aircraft and Parts Industry, 1958.

January 1960. 50¢.

Miscellaneous

D.B.S. 42-212. Annual.

The Miscellaneous Transportation Equipment Industry, 1958.

November 1959. 25¢.





In the General Review (D.B.S. 42-201. Annual), there is a regional breakdown (for each province) for most of the statistics. In the separate industry publications, there is generally no information by province.

The general pattern of data presented in all these publications is:

1. Principal statistics:

- establishments (number);
- employees (number);
- salaries and wages;
- cost of fuel and electricity at plant;
- cost of materials at plant;
- value added by manufacture;
- gross selling value of products at works.

Also: Principal statistics (with some variation in detail) grouped according to size of establishment (based on reported value of production); Motor Vehicle industry is excepted.

2. Inventories:

- raw materials and supplies;
- goods in process;
- finished goods of own manufacture.

3. Products manufactured:

- quantity;
- selling value at works.

4. Number of employees and earnings:

- office and supervisory;
- production workers (male; female).

5. Capital and repair expenditures in industry:

- capital expenditures (construction; machinery and equipment);
- repair expenditures (construction; machinery and equipment).



## 6. Imports and exports, by products:

- quantity;
- value;

## 7. Fuel and electricity, by type of fuel:

- quantity;
- cost at works.

## Materials used, by type:

- quantity;
- cost at works.

## 8. List of firms included.

For the Motor Vehicles industry, the following additional data appears:

- registrations;
- apparent supply of motor vehicles (detail);
- estimate of motor vehicles withdrawn from use.

(See Exhibit 53).

Road

In connection with the production and sale of motor vehicles, the following additional publications are published, all prepared by the Industry and Merchandising Division of D.B.S.:

D.B.S. 42-002. Monthly.

Motor Vehicle Shipments, June 1960.

\$1.00 per year.

Contains monthly data on production and shipments of motor vehicles, by type of car and weight of truck or bus.

D.B.S. 42-001. Monthly.

Preliminary Report on the Production of Motor Vehicles,

June 1960.

\$1.00 per year.



Brief report on total production of passenger cars and commercial vehicles.

D.B.S. 63-007. Monthly.

New Motor Vehicle Sales and Motor Vehicle Financing.

May 1960.

\$1.00 per year.

Number of vehicles; retail value; and amount of financing is published, with separate tabulations for passenger cars and commercial vehicles.

D.B.S. 63-208. Annual.

New Motor Vehicle Sales and Motor Vehicle Financing, 1958.

Dated July 1959.

50¢.

This publication is more detailed than the corresponding monthly publication. Data are provided by province and by month. Separate tabulations appear for new British and European made vehicles sold in Canada. Also information is included on financing of used vehicles.





## RAILWAYS DURING THE PERIOD ENDED June 7, 1960.

No. 21

| DIVISION<br>Ended |                | CUMULATIVE TOTALS FROM FIRST PERIOD OF YEAR TO DATE |                |                |                        |                |                |                        |                |                |    |
|-------------------|----------------|---|----------------|----------------|------------------------|----------------|----------------|------------------------|----------------|----------------|----|
|                   |                | TOTAL<br>To   |                |                | EASTERN DIVISION<br>To |                |                | WESTERN DIVISION<br>To |                |                |    |
| May 21<br>1960    | June 7<br>1959 | June 7<br>1960                                      | June 7<br>1959 | June 7<br>1958 | June 7<br>1960         | June 7<br>1959 | June 7<br>1958 | June 7<br>1960         | June 7<br>1959 | June 7<br>1958 |    |
| 5,852             | 5,231          | 109,153   | 94,010         | 111,209        | 20,482                 | 19,895         | 27,194         | 88,671                 | 74,115         | 84,015         | 1  |
| 1,405             | 1,323          | 35,490  | 43,632         | 47,310         | 9,643                  | 10,447         | 11,617         | 25,847                 | 33,185         | 35,693         | 2  |
| 1,041             | 965            | 47,255  | 48,224         | 53,250         | 25,685                 | 26,247         | 28,645         | 21,570                 | 21,977         | 24,605         | 3  |
| 9                 | 28             | 1,981   | 2,447          | 3,241          | 763                    | 779            | 798            | 1,218                  | 1,668          | 2,443          | 4  |
| 30                | 12             | 15,301  | 17,226         | 18,659         | 14,320                 | 16,384         | 17,581         | 981                    | 842            | 1,078          | 5  |
| 153               | 139            | 9,286   | 9,984          | 9,533          | 4,997                  | 5,464          | 5,860          | 4,289                  | 4,520          | 3,673          | 6  |
| 615               | 724            | 16,237  | 19,398         | 22,614         | 2,318                  | 3,211          | 3,967          | 13,919                 | 16,187         | 18,647         | 7  |
| 18                | 23             | 1,311   | 1,137          | 1,471          | 905                    | 725            | 754            | 406                    | 412            | 717            | 8  |
| 313               | 321            | 10,944  | 10,136         | 11,871         | 3,867                  | 4,316          | 4,635          | 7,077                  | 5,820          | 7,236          | 9  |
| 37                | 42             | 2,962   | 3,336          | 2,769          | 1,769                  | 2,032          | 1,787          | 1,193                  | 1,304          | 982            | 10 |
| 651               | 481            | 71,447  | 74,597         | 79,612         | 46,958                 | 47,928         | 51,669         | 24,489                 | 26,669         | 27,943         | 11 |
| 95                | 119            | 10,176  | 10,065         | 10,888         | 7,738                  | 7,724          | 8,490          | 2,438                  | 2,341          | 2,398          | 12 |
| 1,780             | 1,484          | 67,243  | 61,935         | 33,288         | 58,595                 | 51,893         | 31,858         | 8,648                  | 10,042         | 1,430          | 13 |
| -                 | 2              | 9,034   | 7,405          | 6,116          | 8,952                  | 7,317          | 5,711          | 82                     | 88             | 405            | 14 |
| 23                | 20             | 6,089   | 5,409          | 5,664          | 5,560                  | 4,781          | 5,000          | 529                    | 628            | 664            | 15 |
| 40                | 49             | 19,466  | 20,513         | 21,905         | 18,427                 | 19,680         | 20,937         | 1,039                  | 833            | 968            | 16 |
| -                 | 1              | 13,978  | 11,801         | 3,774          | 13,963                 | 11,787         | 3,765          | 15                     | 14             | 9              | 17 |
| 208               | 294            | 13,059  | 14,001         | 23,963         | 8,409                  | 8,477          | 19,039         | 4,650                  | 5,524          | 4,924          | 18 |
| 339               | 218            | 15,096  | 12,113         | 13,122         | 11,626                 | 8,653          | 9,734          | 3,470                  | 3,460          | 3,388          | 19 |
| 335               | 352            | 30,412  | 26,639         | 29,006         | 25,603                 | 21,576         | 24,502         | 4,809                  | 5,063          | 4,504          | 20 |
| 82                | 95             | 4,709   | 4,494          | 5,050          | 3,261                  | 2,997          | 3,672          | 1,448                  | 1,497          | 1,378          | 21 |
| 394               | 407            | 8,569   | 8,381          | 8,510          | 70                     | 88             | 140            | 8,499                  | 8,293          | 8,370          | 22 |
| 1,171             | 1,109          | 47,372  | 49,514         | 52,881         | 28,666                 | 30,632         | 32,244         | 18,706                 | 18,882         | 20,637         | 23 |
| 472               | 560            | 57,830  | 60,409         | 56,674         | 43,667                 | 46,492         | 42,768         | 14,163                 | 13,917         | 13,906         | 24 |
| 478               | 366            | 14,024  | 14,426         | 13,692         | 5,898                  | 6,211          | 6,238          | 8,126                  | 8,215          | 7,454          | 25 |
| 494               | 420            | 50,779  | 55,379         | 63,993         | 47,375                 | 51,419         | 58,636         | 3,404                  | 3,960          | 5,357          | 26 |
| 291               | 366            | 8,528   | 10,264         | 12,128         | 4,624                  | 6,104          | 7,745          | 3,904                  | 4,160          | 4,383          | 27 |
| 189               | 293            | 14,202  | 17,411         | 16,330         | 10,382                 | 12,285         | 11,172         | 3,820                  | 5,126          | 5,158          | 28 |
| 139               | 139            | 22,011  | 26,105         | 10,020         | 20,547                 | 24,298         | 8,653          | 1,464                  | 1,807          | 1,367          | 29 |
| 754               | 1,111          | 40,561  | 37,992         | 34,316         | 28,579                 | 26,961         | 25,269         | 11,982                 | 11,031         | 9,047          | 30 |
| 1,366             | 994            | 34,345  | 23,736         | 21,245         | 7,517                  | 5,763          | 5,953          | 26,828                 | 17,973         | 15,292         | 31 |
| 3,145             | 3,962          | 84,677  | 94,344         | 84,243         | 23,459                 | 28,491         | 27,019         | 61,218                 | 65,853         | 57,224         | 32 |
| 111               | 107            | 53,249  | 44,495         | 59,858         | 41,311                 | 34,886         | 42,153         | 11,938                 | 9,609          | 17,705         | 33 |
| 420               | 409            | 21,070  | 21,693         | 19,490         | 12,600                 | 13,969         | 13,817         | 8,470                  | 7,724          | 5,673          | 34 |
| 650               | 502            | 65,578  | 65,486         | 65,999         | 52,109                 | 53,314         | 54,230         | 13,469                 | 12,172         | 11,769         | 35 |
| 29                | 36             | 9,366   | 9,862          | 9,894          | 8,673                  | 8,775          | 9,534          | 693                    | 1,087          | 360            | 36 |
| 128               | 106            | 11,398  | 11,186         | 11,376         | 8,396                  | 8,693          | 8,148          | 3,002                  | 2,493          | 3,228          | 37 |
| 28                | 21             | 6,709   | 6,737          | 5,773          | 6,040                  | 6,253          | 5,098          | 669                    | 484            | 675            | 38 |
| 132               | 79             | 8,403   | 8,080          | 8,773          | 6,292                  | 6,470          | 6,765          | 2,111                  | 1,610          | 2,008          | 39 |
| 134               | 147            | 11,047  | 10,842         | 10,388         | 8,918                  | 8,494          | 7,633          | 2,129                  | 2,348          | 2,755          | 40 |
| 71                | 81             | 4,450   | 4,158          | 5,425          | 3,075                  | 2,997          | 3,679          | 1,375                  | 1,161          | 1,746          | 41 |
| 20                | 41             | 9,590   | 9,235          | 8,272          | 8,011                  | 7,928          | 7,139          | 1,579                  | 1,307          | 1,133          | 42 |
| 69                | 100            | 37,990  | 41,600         | 34,922         | 36,824                 | 40,283         | 33,687         | 1,166                  | 1,317          | 1,235          | 43 |
| 602               | 443            | 24,594  | 25,073         | 24,666         | 10,247                 | 10,200         | 10,968         | 14,347                 | 14,873         | 13,698         | 44 |
| 150               | 184            | 7,626   | 8,076          | 5,740          | 4,608                  | 5,089          | 3,332          | 3,018                  | 2,987          | 2,408          | 45 |
| 116               | 323            | 13,245  | 12,494         | 10,661         | 10,904                 | 9,839          | 8,726          | 2,341                  | 2,655          | 1,935          | 46 |
| 1,275             | 1,253          | 155,262   | 137,877        | 112,934        | 129,813                | 116,474        | 93,573         | 25,449                 | 21,403         | 19,361         | 47 |
| 3,099             | 3,250          | 199,605   | 234,444        | 264,201        | 134,435                | 162,483        | 187,415        | 65,170                 | 71,961         | 76,786         | 48 |
| 28,963            | 29,032         | 1,532,709   | 1,547,801      | 1,546,719      | 996,881                | 1,017,204      | 1,008,949      | 535,828                | 530,597        | 537,770        | 49 |
| 4,289             | 4,327          | 649,002   | 626,263        | 639,054        | 561,092                | 541,305        | 553,539        | 87,910                 | 84,958         | 85,515         | 50 |
| 568               | 432            | 67,637  | 52,398         | ..             | 54,948                 | 43,689         | ..             | 12,689                 | 8,709          | ..             | 51 |

SOURCE: D.B.S. 52-CCL, Weekly,  
CARROLLINGS (Period ended June 7, 1960).





## RAILWAY FREIGHT TRAFFIC

TABLE 1. Revenue Freight Carried by Railways in Canada, 1958

Canada — Concluded

| No.   | Commodities   | Originated<br>or<br>loaded at<br>stations in<br>Canada<br>(includes<br>imports at<br>lake or<br>ocean ports) | Received from U.S. (rail)         |                               | 1958   |                               | 1957<br>Total | Terminated<br>or<br>unloaded at<br>stations in<br>Canada<br>(includes<br>exports at<br>lake or<br>ocean ports) | Delivered<br>to<br>U.S. rail<br>connections |
|-------|---|--|-----------------------------------|-------------------------------|--|-------------------------------|---------------|--|---|
|       |   |  | Destined to<br>Canadian<br>points | Destined to<br>U.S.<br>points | Total<br>freight<br>traffic<br>(excluding<br>duplications) | Per cent<br>of grand<br>total |               |  |   |
|       |   |  | tons                              |                               |  |                               |               |  |   |
|       | Manufactures and miscellaneous (C.L.) —<br>Concluded                      |  |                                   |                               |  |                               |               |  |   |
| 721   | Abrasives, other than crude .....   | 9,023  | 17,332                            | 6,039                         | 32,394   | .021                          | 37,498        | 23,579   | 12,476                                      |
| 723   | Bagging: burlap, cotton, gunny, and jute,<br>n.o.s. ....                  | 11,924   | 2,291                             | 2,973                         | 17,188   | .011                          | 17,474        | 9,261  | 8,304                                       |
| 725   | Bags: burlap, cotton, gunny, and jute, n.o.s. ....                        | 4,697  | 453                               | 894                           | 6,044  | .004                          | 8,472         | 4,382  | 1,796                                       |
| 727   | Cotton cloth and cotton fabrics, n.o.s. ....                              | 16,140   | 3,236                             | 2,105                         | 21,481   | .014                          | 17,377        | 18,714   | 2,745                                       |
| 729   | Cotton factory products .....   | 11,284   | 4,098                             | 5,401                         | 20,783   | .014                          | 29,840        | 15,439   | 5,578                                       |
| 731   | Synthetic fibre and yarns (rayon and nylon) .....                         | 3,079  | 1,419                             | 673                           | 5,171  | .003                          | 7,456         | 4,489  | 727   |
| 733   | Cloth and fabrics, n.o.s. ....  | 8,840  | 446                               | 1,602                         | 10,888   | .007                          | 14,136        | 8,761  | 1,799                                       |
| 735   | Rope, cordage, and binder twine, n.o.s. ....                              | 28,337   | 1,656                             | 4,338                         | 34,331   | .023                          | 43,308        | 18,212   | 15,758                                      |
| 737   | Boots, shoes, and findings, n.o.s. ....                                   | 1,824  | 221                               | 7,024                         | 9,069  | .006                          | 13,163        | 1,851  | 7,322                                       |
| 739   | Luggage and handbags, n.o.s. ....   | 313  | 178                               | 315                           | 806  | .001                          | 1,115         | 414  | 534   |
| 741   | Athletic, gymnasium, playground, and sport-<br>ing equipment, n.o.s. .... | 897  | 657                               | 699                           | 2,253  | .001                          | 4,413         | 1,364  | 849   |
| 743   | Games and toys .....  | 658  | 1,757                             | 4,470                         | 6,885  | .005                          | 7,792         | 2,289  | 4,547                                       |
| 745   | Liquors, alcoholic, n.o.s. ....   | 101,152  | 8,585                             | 8,563                         | 118,300  | .078                          | 131,844       | 79,497   | 37,759                                      |
| 747   | Wine .....  | 15,968   | 1,066                             | 36,069                        | 53,103   | .035                          | 56,275        | 16,419   | 36,392                                      |
| 749   | Liquors, malt .....   | 385,214  | 1,163                             | 79,680                        | 466,057  | .307                          | 537,873       | 383,574  | 80,880                                      |
| 751   | Beverages, n.o.s. ....  | 10,121   | 102                               | 507                           | 10,730   | .007                          | 9,207         | 14,459   | 731   |
| 753   | Ice .....   | 13,292   | 293                               | 188                           | 13,773   | .009                          | 20,485        | 13,562   | 265   |
| 755   | Syrup and molasses, refined .....   | 42,181   | 6,920                             | 91,983                        | 141,084  | .093                          | 144,742       | 46,859   | 96,663                                      |
| 757   | Molasses, residual .....  | 36,821   | 2,387                             | 23,213                        | 62,421   | .041                          | 53,599        | 30,010   | 29,969                                      |
| 759   | Sugar .....   | 408,286  | 3,213                             | 84,840                        | 496,339  | .326                          | 450,568       | 400,672  | 88,136                                      |
| 761   | Candy and confectionery .....   | 41,201   | 1,084                             | 41,105                        | 83,390   | .055                          | 90,018        | 42,637   | 42,336                                      |
| 763   | Food products, n.o.s., in cans and pack-<br>ages, not frozen .....        | 818,779  | 114,653                           | 541,721                       | 1,475,153  | .970                          | 1,424,429     | 901,966  | 571,130                                     |
| 765   | Food products, n.o.s. frozen .....  | 8,368  | 14,573                            | 18,925                        | 41,866   | .028                          | 49,738        | 21,063   | 19,430                                      |
| 767   | Starch .....  | 27,445   | 5,655                             | 68,113                        | 101,213  | .067                          | 125,541       | 32,159   | 69,035                                      |
| 769   | Soap and cleaning and washing compounds .....                             | 130,549  | 6,564                             | 24,455                        | 161,568  | .106                          | 160,295       | 137,757  | 25,565                                      |
| 771   | Matches .....   | 3,177  | 263                               | 1,205                         | 4,645  | .003                          | 7,338         | 3,384  | 1,259                                       |
| 773   | Feed, animal and poultry, n.o.s. ....                                     | 771,807  | 68,948                            | 828,061                       | 1,668,816  | 1.098                         | 1,682,570     | 744,956  | 922,718                                     |
| 775   | Manufactured tobacco, n.o.s. ....   | 10,938   | 240                               | 1,421                         | 12,599   | .008                          | 10,094        | 7,072  | 1,444                                       |
| 777   | Cigarettes .....  | 38,049   | 330                               | 663                           | 39,042   | .026                          | 26,383        | 38,514   | 1,057                                       |
| 779   | Containers, metal .....   | 147,905  | 13,545                            | 10,575                        | 172,025  | .113                          | 175,178       | 160,522  | 11,710                                      |
| 781   | Containers, wooden .....  | 12,284   | 4,302                             | 957                           | 17,543   | .012                          | 19,609        | 15,671   | 1,209                                       |
| 783   | Containers, fibreboard and paperboard, k.d. ....                          | 45,492   | 3,724                             | 33,453                        | 82,669   | .054                          | 86,071        | 48,607   | 35,003                                      |
| 785   | Containers, n.o.s. ....   | 22,166   | 15,165                            | 15,071                        | 52,402   | .034                          | 66,610        | 33,538   | 16,875                                      |
| 787   | Containers, returned empty .....  | 192,698  | 8,857                             | 21,601                        | 223,156  | .147                          | 259,810       | 197,067  | 24,095                                      |
| 789   | Scrap iron and scrap steel .....  | 678,273  | 99,785                            | 32,164                        | 810,222  | .533                          | 1,148,315     | 597,046  | 163,146                                     |
| 791   | Iron and steel borings, turnings, etc. ....                               | 18,581   | 1,362                             | 15,687                        | 35,630   | .023                          | 65,862        | 20,486   | 16,272                                      |
| 793   | Furnace slag .....  | 32,986   | 5,788                             | 1,935                         | 40,709   | .027                          | 52,321        | 37,570   | 2,443                                       |
| 795   | Waste materials for remelting, n.o.s. ....                                | 199,516  | 3,625                             | 32,902                        | 236,043  | .155                          | 315,125       | 202,468  | 69,817                                      |
| 797   | Waste materials, n.o.s. ....  | 129,712  | 21,230                            | 13,230                        | 164,172  | .108                          | 207,082       | 142,671  | 27,511                                      |
| 799   | Manufactures and miscellaneous, n.o.s. ....                               | 2,535,262  | 100,713                           | 495,638                       | 3,131,613  | 2.060                         | 2,717,949     | 2,617,820  | 510,926                                     |
| (940) | Total manufactures and miscellaneous ....                                 | 35,259,081   | 3,401,239                         | 7,666,383                     | 46,326,703   | 30.468                        | 51,444,050    | 31,720,708   | 14,845,818                                  |
| (960) | Grand total, carload traffic .....  | 126,850,318  | 10,346,540                        | 13,347,438                    | 150,544,296  | 99.009                        | 170,279,437   | 123,146,482  | 28,237,616                                  |
|       | All L.C.L. freight  |  |                                   |                               |  |                               |               |  |   |
| 970   | All L.C.L. freight .....  | 1,245,057  | 131,118                           | 130,910                       | 1,507,085  | .991                          | 2,063,568     | 1,377,032  | 144,911                                     |
| (980) | Grand total, carload and L.C.L. traffic ....                              | 128,095,375  | 10,477,658                        | 13,478,348                    | 152,051,381  | 100.000                       | 172,343,005   | 124,523,514  | 28,382,527                                  |

SOURCE: D.B.S. 52-205- Annual,  
RAILWAY FREIGHT TRAFFIC (Year ended December 31, 1958)



RAILWAY TRANSPORT

TABLE 3. Aid to Railways - Cumulative Total to December 31<sup>1</sup>

|                            | 1954        | 1955        | 1956        | 1957        | 1958        |
|----------------------------|-------------|-------------|-------------|-------------|-------------|
|                            | dollars     |             |             |             |             |
| Government of Canada ..... | 172,200,223 | 172,200,223 | 172,200,223 | 172,200,223 | 172,200,223 |
| Provincial .....           | 33,391,669  | 33,391,669  | 33,391,669  | 33,391,669  | 33,391,669  |
| Municipal .....            | 13,301,691  | 13,301,691  | 13,301,691  | 13,301,691  | 13,301,691  |
| Total .....                | 218,893,583 | 218,893,583 | 218,893,583 | 218,893,583 | 218,893,583 |

<sup>1</sup> Includes subsidies granted to electric railways.

TABLE 4. Land Grants, Cumulative Total at December 31, 1958

| Granted by                 | Bonus grants  | Grants for right of way, station grounds, and townsite purposes | Total                     |
|----------------------------|---------------|---|---------------------------|
|                            | acres         |   |                           |
| Government of Canada ..... | 31,783,654.88 | 97,987.60   | 31,881,642.48             |
| Nova Scotia .....          | 160,000.00    | —   | 160,000.00                |
| New Brunswick .....        | 1,788,392.00  | —   | 1,788,392.00              |
| Quebec .....               | 2,085,710.00  | —   | 2,085,710.00              |
| Ontario .....              | 3,241,207.01  | 229,501.97  | 3,470,708.98              |
| Manitoba .....             | —             | 2,604.21  | 2,604.21                  |
| Saskatchewan .....         | —             | 4,931.57  | 4,931.57                  |
| Alberta .....              | —             | 396.14  | 396.14                    |
| British Columbia .....     | 8,233,410.00  | 12,371.74   | 8,245,781.74 <sup>1</sup> |
| Total .....                | 47,292,373.89 | 347,793.23  | 47,640,167.12             |

<sup>1</sup> Includes 4,065,076 acres repurchased from B.C. Southern and Columbia and Western Railways.

TABLE 5. Aid Granted to Railways by Governments and Municipalities to December 31, 1958  
Changes since 1942 Report  
Cash subsidies - nil  
Land Grants

| Name of railway                             | Name of province       | By Government of Canada | By Provincial Government | Total |
|---|------------------------|-------------------------|--------------------------|-------|
|   |                        | acres                   |                          |       |
| Alberta Central (Canadian Pacific) .....    | Alberta .....          | —                       | 1.95                     | 1.95  |
| Canadian Northern Pacific .....             | British Columbia ..... | —                       | 3.40                     | 3.40  |
| Grand Trunk Pacific .....                   | Alberta .....          | —                       | 63.00                    | 63.00 |
| Kettle Valley .....                         | British Columbia ..... | —                       | 1.09                     | 1.09  |
| Manitoba Northern (Canadian National) ..... | Manitoba .....         | —                       | 6.70                     | 6.70  |
| Pacific Great Eastern .....                 | British Columbia ..... | —                       | 0.69                     | 0.69  |
| Total .....                                 |                        | —                       | 76.83                    | 76.83 |

SOURCE: D.B.S. 52-207- Annual,  
RAILWAY TRANSPORT (1958, Part 1)





COMPARATIVE SUMMARY STATISTICS 1954 TO 1958

TABLE 11. Gross Earnings, Year ended December 31

|  | 1954                   | 1955                   | 1956          | 1957          | 1958          |
|--|------------------------|------------------------|---------------|---------------|---------------|
|  | dollars                |                        |               |               |               |
| Operating revenues:                    |                        |                        |               |               |               |
| Rail line:                             |                        |                        |               |               |               |
| Freight .....                          | 872,438,270            | 965,862,326            | 1,110,115,769 | 1,080,053,400 | 995,853,940   |
| Passenger .....                        | 82,106,355             | 83,039,229             | 85,282,091    | 86,851,789    | 77,318,387    |
| Baggage .....                          | 330,247                | 344,369                | 384,391       | 361,424       | 296,432       |
| Sleeping, parlour and chair cars.....  | 10,113,918             | 10,560,696             | 11,954,093    | 11,893,425    | 10,434,058    |
| Parlour and chair cars .....           | 862,217                | 828,805                |               |               |               |
| Mail .....                             | 14,928,153             | 14,485,385             | 13,975,220    | 15,397,282    | 15,171,791    |
| Express .....                          | 47,882,418             | 50,073,445             | 26,137,537    | 22,408,506    | 22,348,264    |
| Other passenger train.....             | 55,003                 | 26,025                 | 21,278        | 21,353        | 20,137        |
| Milk.....                              | 529,482                | 537,338                | 533,262       | 451,171       | 336,291       |
| Switching .....                        | 8,451,222              | 9,299,777              | 10,844,024    | 9,652,416     | 8,536,836     |
| Water transfer—Freight .....           | 1,326,134              | 1,562,787              | 884,191       | 935,070       | 1,043,008     |
| “ “ — Passenger .....                  | 422,560                | 459,900                | 133,172       | 139,382       | 129,192       |
| Total.....                             | 1,039,445,979          | 1,137,080,082          | 1,260,265,026 | 1,228,165,218 | 1,131,488,336 |
| Water line:                            |                        |                        |               |               |               |
| Freight .....                          | 3,600,226              | 3,898,817              | 3,171,244     | —             | —             |
| Passenger .....                        | 408,725                | 416,840                | 69,442        | —             | —             |
| Baggage .....                          | 80                     | 53                     | —             | —             | —             |
| Mail.....                              | 2,988                  | 2,827                  | 2,605         | —             | —             |
| Express .....                          | 684                    | 1,153                  | —             | —             | —             |
| Other.....                             | 46,890                 | 44,432                 | 33,865        | —             | —             |
| Total.....                             | 4,059,593              | 4,364,122              | 3,277,156     | —             | —             |
| Incidental:                            |                        |                        |               |               |               |
| Dining and buffet car .....            | 7,457,524              | 7,977,230              | 8,248,419     | 8,814,497     | 7,223,064     |
| News service and restaurant.....       | 1,851,557 <sup>1</sup> | 1,861,462 <sup>1</sup> | 4,615,125     | 4,045,964     | 3,707,471     |
| Station, train, etc., privileges ..... | 3,633,294              | 3,486,433              | 645,243       | 711,237       | 640,680       |
| Storage—Parcels and baggage .....      | 269,483                | 249,180                | 247,667       | 225,684       | 152,736       |
| Storage—Freight.....                   | 567,555                | 436,433                | 488,319       | 480,789       | 390,183       |
| Demurrage .....                        | 3,011,584              | 3,771,105              | 5,237,368     | 4,717,878     | 3,526,272     |
| Telegraph and telephone .....          | 18,735,208             | 20,511,725             | 2,282,708     | —             | —             |
| Grain elevators .....                  | 1,801,257              | 1,923,498              | 2,223,293     | 1,895,024     | 1,762,486     |
| Wharves .....                          | —                      | —                      | 1,692,346     | 2,448,295     | 1,891,586     |
| Rents of buildings, etc.....           | 2,702,344              | 2,876,988              | 3,144,908     | 3,365,022     | 3,423,476     |
| Other.....                             | 11,668,893             | 13,491,388             | 7,810,801     | 8,204,082     | 9,288,699     |
| Power .....                            | 35,300                 | 40,856                 | —             | —             | —             |
| Total.....                             | 51,733,999             | 56,626,298             | 36,636,195    | 34,908,472    | 32,006,653    |
| Joint facilities, Cr. balance .....    | 201,347                | 281,099                | 445,544       | 74,240        | 240,428       |
| Total railway operating revenues.....  | 1,095,440,918          | 1,188,351,601          | 1,300,623,923 | 1,263,147,930 | 1,163,735,417 |
| Operating expenses:                    |                        |                        |               |               |               |
| Road maintenance.....                  | 206,712,991            | 212,397,087            | 249,628,976   | 265,104,802   | 248,593,455   |
| Equipment maintenance .....            | 227,234,735            | 227,866,346            | 251,328,643   | 256,689,993   | 253,744,614   |
| Traffic .....                          | 22,846,030             | 23,821,263             | 25,301,141    | 27,334,536    | 27,208,205    |
| Transportation—Railway line.....       | 474,946,205            | 483,269,439            | 492,725,055   | 478,428,123   | 440,116,687   |
| Transportation—Water line .....        | 2,172,460              | 2,158,211              | 1,504,625     | —             | —             |
| Miscellaneous operations .....         | 16,157,387             | 17,713,709             | 18,807,259    | 16,555,093    | 14,824,857    |
| General expenses .....                 | 69,465,181             | 81,338,626             | 88,564,769    | 92,774,391    | 95,852,643    |
| Total.....                             | 1,019,534,989          | 1,048,564,681          | 1,127,860,468 | 1,136,886,938 | 1,080,340,461 |
| Equipment rents—Dr.....                | ...                    | ...                    | 1,019,751     | 10,854,129    | 2,369,950     |
| Joint facility rents—Dr. ....          | ...                    | ...                    | 1,307,345     | 2,314,061     | 2,062,663     |
| Railway tax accruals .....             | ...                    | ...                    | 41,151,010    | 53,475,018    | 48,934,683    |
| Total railway operating expenses ..... | ...                    | ...                    | 1,171,338,574 | 1,203,530,146 | 1,132,277,504 |

<sup>1</sup> Includes "Hotel" and "Restaurant".

<sup>2</sup> Included in "Other".

... Not applicable.

TABLE 12. Operating Statistics, Year ended December 31

|  | 1954        | 1955       | 1956       | 1957        | 1958        |
|--|-------------|------------|------------|-------------|-------------|
| Average first main track mileage ..... | 43,124      | 44,588     | 44,777     | 44,839      | 45,165      |
| Locomotive miles:                      |             |            |            |             |             |
| Steam:                                 |             |            |            |             |             |
| Freight .....                          | 53,531,789  | 50,715,297 | 51,950,504 | 30,464,021  | 13,155,971  |
| Passenger .....                        | 37,653,228  | 26,077,933 | 22,172,066 | 15,306,104  | 8,477,994   |
| Train switching.....                   | 5,084,857   | 4,855,569  | 4,833,507  | 3,031,435   | 1,356,082   |
| Yard switching .....                   | 11,469,871  | 10,712,764 | 9,717,613  | 5,999,219   | 2,709,734   |
| Total transportation service .....     | 107,739,745 | 92,361,563 | 88,673,690 | 54,800,779  | 25,699,781  |
| Work train service.....                | 2,571,020   | 2,625,337  | 2,963,561  | 1,895,251   | 927,485     |
| Diesel:                                |             |            |            |             |             |
| Freight .....                          | 27,013,591  | 34,210,768 | 41,774,251 | 51,347,032  | 58,670,214  |
| Passenger .....                        | 7,768,354   | 17,855,115 | 19,626,922 | 22,533,529  | 26,060,580  |
| Train switching.....                   | 1,459,095   | 1,748,903  | 2,211,081  | 3,066,719   | 3,705,693   |
| Yard switching .....                   | 15,605,322  | 17,752,188 | 21,426,100 | 23,306,161  | 24,484,346  |
| Total transportation service .....     | 51,846,362  | 71,566,974 | 85,038,354 | 100,253,441 | 112,920,833 |
| Work train service.....                | 643,015     | 789,817    | 1,029,437  | 1,648,744   | 2,396,410   |

SOURCE: D.B.S. 52-207- Annual,  
RAILWAY TRANSPORT (1958, Part I)





## COMPARATIVE SUMMARY STATISTICS 1954 TO 1958

TABLE 12. Operating Statistics, Year ended December 31 — Continued

|   | 1954             | 1955        | 1956          | 1957          | 1958          |
|---|------------------|-------------|---------------|---------------|---------------|
| <b>Averages:</b>  |                  |             |               |               |               |
| Locomotive miles in transportation service per mile of road                       | 3,718            | 3,692       | 3,899         | 3,480         | 3,087         |
| Train miles in transportation service per mile of road                            | 2,808            | 2,773       | 2,923         | 2,668         | 2,418         |
| Loaded freight cars per freight train   | 26.81            | 28.11       | 28.77         | 29.00         | 30.98         |
| Empty   | 13.19            | 14.08       | 14.90         | 15.40         | 16.43         |
| Total freight train cars per freight train  | 41.00            | 43.19       | 44.68         | 45.39         | 48.42         |
| Passenger train cars per passenger train drawn by locomotive                      | 8.82             | 9.15        | 9.63          | 10.11         | 10.19         |
| Passenger cars per passenger train drawn by locomotive                            | 4.83             | 4.99        | 5.23          | 5.43          | 5.36          |
| <b>Freight traffic—Revenue freight (tons-2,000 lb.):</b>                          |                  |             |               |               |               |
| Originated on Canadian railways <sup>1</sup>                                      | 109,854,729      | 131,409,254 | 156,518,062   | 143,349,331   | 129,238,306   |
| Received from U.S. connections <sup>1</sup>                                       | 33,340,111       | 36,452,902  | 33,090,190    | 30,694,830    | 24,203,450    |
| Total tons originated   | 143,194,840      | 167,862,156 | 189,608,272   | 174,044,161   | 153,441,756   |
| Interchanged between Canadian railways  | 19,275,173       | 20,668,261  | 24,469,563    | 22,846,795    | 20,758,175    |
| Total tons  | 162,470,013      | 188,530,417 | 214,077,835   | 196,890,956   | 174,199,931   |
| Tons carried one mile   | '000 57,547,300  | 66,176,129  | 78,819,966    | 71,047,229    | 66,356,829    |
| Tons originated per mile of road  | 3,321            | 3,765       | 4,234         | 3,882         | 3,397         |
| Tons carried one mile (rail line) per mile of road                                | 1,333,216        | 1,483,273   | 1,760,135     | 1,584,343     | 1,469,050     |
| Average haul per ton, originated (revenue—non-revenue) miles                      | 402              | 394         | 416           | 408           | 432           |
| <b>Freight traffic—Revenue and non-revenue freight (tons-2,000 lb.):</b>          |                  |             |               |               |               |
| Tons carried  | 177,281,680      | 203,120,682 | 230,365,659   | 210,727,725   | 187,147,036   |
| Tons carried one mile   | '000 61,396,952  | 69,664,757  | 83,104,975    | 74,452,460    | 68,914,260    |
| Tons per loaded car mile in transportation service (revenue and non-revenue)      | 30.34            | 31.30       | 33.12         | 32.86         | 32.35         |
| Gross ton miles—Freight train cars  | '000 133,201,042 | 149,756,281 | 174,840,163   | 156,434,901   | 146,138,505   |
| —Passenger train cars   | '000 29,337,698  | 29,000,772  | 28,789,247    | 27,912,465    | 25,823,179    |
| —Total  | '000 162,538,740 | 178,757,053 | 203,629,409   | 184,347,366   | 171,961,684   |
| Gross ton miles per freight train mile  | 1,768            | 1,894       | 2,008         | 2,006         | 2,129         |
| Gross ton miles (transportation service) per mile of road                         | 3,769,102        | 4,009,111   | 4,547,634     | 4,111,318     | 3,807,410     |
| Train hours—Freight service   | 4,111,839        | 4,354,459   | 4,857,731     | 4,137,107     | 3,516,971     |
| <b>Passenger traffic:</b>   |                  |             |               |               |               |
| Passengers carried  | 28,396,528       | 27,229,962  | 26,070,766    | 22,965,974    | 21,376,438    |
| Passengers carried one mile   | '000 2,863,037   | 2,891,685   | 2,907,568     | 2,925,133     | 2,485,861     |
| Passengers carried per mile of road   | 658              | 611         | 582           | 512           | 473           |
| Passengers carried one mile per mile of road                                      | 66,391           | 64,853      | 64,934        | 65,236        | 55,040        |
| Average number of passengers per passenger train car in transportation service    | 7                | 7           | 7             | 7             | 7             |
| Average number of passengers per passenger car in transportation service          | 13               | 13          | 13            | 13            | 12            |
| Average distance each railway carried a passenger                                 | 100.8            | 106.2       | 111.5         | 127.4         | 116.3         |
| <b>Freight revenues—Rail line:</b>  |                  |             |               |               |               |
| Freight receipts  | \$ 872,438,270   | 965,862,326 | 1,110,115,769 | 1,080,053,400 | 995,853,940   |
| Switching receipts  | \$ 8,451,222     | 9,299,777   | 10,844,024    | 9,652,416     | 8,536,836     |
| Other freight train receipts and water transfers                                  | \$ 1,326,134     | 1,562,787   | 884,191       | 935,070       | 1,043,008     |
| Total freight revenues  | \$ 882,215,626   | 976,724,890 | 1,121,843,984 | 1,090,640,886 | 1,005,433,784 |
| Average freight revenue per mile of road  | \$ 20,458        | 21,906      | 25,054        | 24,323        | 22,261        |
| Average freight receipts per mile of road   | \$ 20,231        | 21,662      | 24,792        | 24,087        | 22,049        |
| Average freight receipts per freight train mile                                   | \$ 11.58         | 12.21       | 12.75         | 13.85         | 14.51         |
| Average freight receipts per loaded freight car mile in transportation service    | \$ 43.12         | 43.46       | 44.24         | 47.67         | 46.74         |
| Average freight receipts per ton originated                                       | \$ 6.09          | 5.75        | 5.85          | 6.21          | 6.49          |
| Average freight receipts per ton mile   | \$ 1.517         | 1.460       | 1.409         | 1.520         | 1.501         |
| <b>Passenger revenues—Rail line:</b>  |                  |             |               |               |               |
| Passenger receipts  | \$ 82,106,355    | 83,039,229  | 85,282,091    | 86,851,789    | 77,318,387    |
| Sleeper, parlour, observation car receipts  | \$ 10,976,135    | 11,389,501  | 11,954,093    | 11,893,425    | 10,434,058    |
| Baggage   | \$ 330,247       | 344,369     | 384,391       | 361,424       | 296,432       |
| Mail  | \$ 14,928,153    | 14,485,385  | 13,975,220    | 15,397,282    | 15,171,791    |
| Express <sup>2</sup>  | \$ 47,882,418    | 50,073,445  | 26,137,537    | 22,408,506    | 22,348,264    |
| Milk  | \$ 529,482       | 537,338     | 533,262       | 451,171       | 336,291       |
| Other passenger train revenue and water transfers                                 | \$ 477,563       | 485,925     | 154,450       | 160,735       | 149,329       |
| Total passenger train revenues  | \$ 157,230,353   | 160,373,599 | 138,421,044   | 137,524,332   | 126,054,552   |
| Average passenger train revenue per mile of road                                  | \$ 3,646.01      | 3,596.79    | 3,091.34      | 3,067.07      | 2,790.10      |
| Average passenger train revenue per passenger train mile                          | \$ 3.44          | 3.60        | 3.16          | 3.30          | 3.11          |
| Average passenger train revenue per passenger train car in transportation service | \$ 37.71         | 38.39       | 32.90         | 33.61         | 32.97         |
| Average passenger receipts per passenger per railway                              | \$ 2.89          | 3.05        | 3.27          | 3.78          | 3.62          |
| Average passenger receipts per passenger mile                                     | \$ 2.87          | 2.87        | 2.93          | 2.97          | 3.11          |
| Average passenger receipts per passenger car in transportation service            | \$ 36.40         | 36.82       | 37.56         | 39.66         | 38.45         |
| Average sleeper, etc., receipts per sleeper, etc. car miles                       | \$ 9.2           | 9.4         | 9.9           | 10.2          | 10.0          |

See footnotes at end of table.

SOURCE: D.B.S. 52-207—Annual,  
RAILWAY TRANSPORT (1958, Part I)



COMPARATIVE SUMMARY STATISTICS 1954 TO 1958

TABLE 14. Traffic Handled in Year ended December 31 - Concluded

|   | 1954              | 1955        | 1956        | 1957        | 1958        |
|---|-------------------|-------------|-------------|-------------|-------------|
|   | tons (2,000 lbs.) |             |             |             |             |
| Manufactures and miscellaneous—Concluded:                     |                   |             |             |             |             |
| Ice .....   | 16                | 16          | 16          | 20,487      | 13,789      |
| Syrup and molasses, refined .....                             | 22                | 22          | 22          | 144,742     | 141,104     |
| Molasses, residual .....                                      | 22                | 22          | 22          | 53,599      | 63,045      |
| Sugar.....  | 473,684           | 490,932     | 489,698     | 450,668     | 495,748     |
| Candy and confectionery .....                                 | 16                | 16          | 16          | 90,069      | 83,469      |
| Food products, n.o.s., in cans and packages, not frozen ..... | 1,388,358         | 1,428,992   | 1,511,230   | 1,424,459   | 1,474,708   |
| Food products, n.o.s. frozen.....                             | 22                | 22          | 22          | 49,687      | 40,664      |
| Starch .....  | 16                | 16          | 16          | 125,541     | 101,221     |
| Soap and cleaning and washing compounds .....                 | 16                | 16          | 16          | 160,325     | 161,981     |
| Matches .....   | 16                | 16          | 16          | 7,338       | 4,542       |
| Feed, animal and poultry, n.o.s. ....                         | 16                | 16          | 16          | 1,682,704   | 1,673,102   |
| Manufactured tobacco, n.o.s. ....                             | 16                | 16          | 16          | 10,094      | 8,537       |
| Cigarettes .....  | 16                | 16          | 16          | 26,383      | 39,100      |
| Containers, metal .....                                       | 16                | 16          | 16          | 175,183     | 171,967     |
| Containers, wooden .....                                      | 16                | 16          | 16          | 19,609      | 17,553      |
| Containers, fibreboard and paperboard, K.D. ....              | 16                | 16          | 16          | 86,071      | 82,748      |
| Containers, n.o.s.....  | 16                | 16          | 16          | 66,897      | 53,832      |
| Containers, returned empty .....                              | 16                | 16          | 16          | 261,309     | 226,429     |
| Scrap iron and scrap steel.....                               | 933,103           | 1,478,422   | 1,999,799   | 1,149,816   | 808,408     |
| Iron and steel borings, turnings, etc. ....                   |                   |             |             | 66,052      | 34,521      |
| Furnace slag .....  |                   |             |             | 51,155      | 43,300      |
| Waste materials for remelting, n.o.s.....                     |                   |             |             | 314,306     | 234,561     |
| Waste materials, n.o.s. ....                                  | 16                | 16          | 16          | 196,632     | 164,172     |
| Manufactures and miscellaneous, n.o.s. ....                   | 6,741,311         | 7,174,310   | 7,338,176   | 2,750,497   | 3,141,472   |
| Total manufactures and miscellaneous .....                    | 42,635,594        | 48,580,865  | 53,113,053  | 51,690,052  | 46,534,971  |
| Grand total, carload traffic .....                            | 140,979,525       | 165,634,836 | 187,323,949 | 171,975,276 | 151,931,925 |
| All L.C.L. freight.....                                       | 2,215,315         | 2,227,320   | 2,284,323   | 2,068,885   | 1,509,831   |
| Grand total, carload and L.C.L. traffic.....                  | 143,194,840       | 167,862,156 | 189,608,272 | 174,044,161 | 153,441,756 |

- <sup>1</sup> Included with "Grain n.o.s."
- <sup>2</sup> Included with "Mill products, n.o.s."
- <sup>3</sup> Included with "Products of agriculture, n.o.s."
- <sup>4</sup> Included with "Fruits and berries, fresh, frozen."
- <sup>5</sup> Included with "Vegetables, fresh, frozen."
- <sup>6</sup> Included with "Poultry, live."
- <sup>7</sup> Included with "Packing house products, edible n.o.s."
- <sup>8</sup> Includes animals, n.o.s.
- <sup>9</sup> Included with "Meats, cooked, cured, dried, smoked and fresh, n.o.s."
- <sup>10</sup> Included with "Animals and products, n.o.s."
- <sup>11</sup> Included with "Ores and concentrates, n.o.s."
- <sup>12</sup> Included with "Products of mines, n.o.s."
- <sup>13</sup> Included with "Logs, posts, poles and piling etc."
- <sup>14</sup> Included with "Products of forests, n.o.s."
- <sup>15</sup> Included with "Chemicals and acids, n.o.s."
- <sup>16</sup> Included with "Manufactures and miscellaneous n.o.s."
- <sup>17</sup> Included with "Petroleum products, refined, n.o.s."
- <sup>18</sup> Included with "Metals and alloys, n.o.s."
- <sup>19</sup> Included with "Machines, machinery and parts, n.o.s."
- <sup>20</sup> Included with "Automobiles, passenger and freight, n.o.s."
- <sup>21</sup> Included with "Printing and wrapping paper."
- <sup>22</sup> Included with "Food products, n.o.s. in cans and packages not frozen."

TABLE 15. Freight Cars in Service on December 31

|             | Number | Capacity          |         |
|-------------|--------|-------------------|---------|
|             |        | Total             | Average |
|             |        | tons (2,000 lbs.) |         |
| Automobile: |        |                   |         |
| 1954 .....  | 7,439  | 310,390           | 41.725  |
| 1955 .....  | 7,406  | 309,000           | 41.723  |
| 1956 .....  | 6,370  | 287,890           | 42.055  |
| 1957 .....  | 6,733  | 298,430           | 44.323  |
| 1958 .....  | 6,722  | 297,980           | 44.329  |
| Ballast:    |        |                   |         |
| 1954 .....  | 2,245  | 117,075           | 52.149  |
| 1955 .....  | 2,378  | 127,585           | 53.652  |
| 1956 .....  | 2,156  | 113,405           | 52.600  |
| 1957 .....  | 2,646  | 150,595           | 56.914  |
| 1958 .....  | 2,708  | 155,305           | 57.350  |

SOURCE: D.B.S. 52-207- Annual,  
RAILWAY TRANSPORT (1958, Part I)





COMPARATIVE SUMMARY STATISTICS 1954 TO 1958

TABLE 16. Passenger Cars in Service on December 31

|   | 1954   | 1955   | 1956               | 1957   | 1958   |
|---|--------|--------|--------------------|--------|--------|
| Self-propelled passenger train cars ..... | 63     | 75     | 90                 | 129    | 139    |
| Coach .....                               | 2,133  | 2,058  | 1,799              | 1,597  | 1,486  |
| Combination passenger .....               | 323    | 325    | 340                | 343    | 328    |
| Colonist .....                            | 254    | 226    | 178                | 136    | 124    |
| Dining .....                              | 196    | 201    | 186                | 183    | 174    |
| Parlour .....                             | 174    | 172    | 173                | 167    | 162    |
| Sleeping .....                            | 956    | 969    | 925                | 879    | 900    |
| Baggage, express and postal .....         | 2,418  | 2,433  | 2,404              | 2,398  | 2,336  |
| Other .....                               | 131    | 115    | 112                | 110    | 84     |
| Total <sup>1</sup> .....                  | 6,648  | 6,574  | 6,222 <sup>2</sup> | 5,942  | 5,733  |
| Cars in company service:                  |        |        |                    |        |        |
| Caboose .....                             | 3,296  | 3,227  | 3,283              | 3,312  | 3,225  |
| All other .....                           | 15,727 | 15,967 | 16,106             | 16,274 | 16,322 |
| Total .....                               | 19,023 | 19,194 | 19,389             | 19,586 | 19,547 |
| Cars leased (included in above) .....     | 703    | 701    | 3,554              | 4,379  | 5,190  |
| Motor vehicles in railway service .....   | 35     | 38     | 57                 | 65     | 31     |
| Other .....                               | —      | —      | 4                  | 1      | 36     |

<sup>1</sup> Includes Pullman Co. cars in Canadian service.  
<sup>2</sup> Includes 13 cars not specified as to type.

TABLE 17. Locomotives in Service on December 31

|   | 1954   | 1955               | 1956   | 1957   | 1958   |
|---|--------|--------------------|--------|--------|--------|
| Locomotives:  | number |                    |        |        |        |
| Steam:  |        |                    |        |        |        |
| Coal burning .....                                  | 2,871  | 2,521              | 2,228  | 1,857  | 1,483  |
| Oil burning .....                                   | 715    | 704                | 621    | 537    | 477    |
| Diesel electric:                                    |        |                    |        |        |        |
| "A" units .....                                     | 1,022  | 1,311              | 385    | 414    | 401    |
| "B" units .....                                     | 130    | 144                | 144    | 161    | 175    |
| Road switcher units .....                           | —      | —                  | 850    | 1,194  | 1,570  |
| Yard switcher units .....                           | —      | —                  | 516    | 603    | 653    |
| Electric .....                                      | 33     | 33                 | 46     | 55     | 64     |
| Total .....   | 4,771  | 4,714 <sup>1</sup> | 4,790  | 4,821  | 4,823  |
| Leased (included in above) .....                    | 36     | 34                 | 35     | 43     | 135    |
| Tractive power, average pounds per locomotive ..... | 42,622 | 42,701             | 49,236 | 50,768 | 52,095 |

<sup>1</sup> Includes one gasoline locomotive.

TABLE 18. Fuel Consumed by Locomotives in Year ended December 31

| Class of locomotive            | 1954              | 1955          | 1956          | 1957          | 1958          |
|--------------------------------|-------------------|---------------|---------------|---------------|---------------|
|                                | tons (2,000 lbs.) |               |               |               |               |
| Freight .....                  | 6,335,044         | 6,717,936     | 9,018,484     | 7,895,529     | 6,941,288     |
| Passenger .....                | 2,730,338         | 2,478,864     | 2,793,291     | 2,691,260     | 2,524,216     |
| Switching .....                | 1,006,344         | 1,030,680     | 1,257,935     | 1,097,977     | 852,699       |
| Non-revenue <sup>1</sup> ..... | 213,219           | 245,299       | 293,141       | 250,594       | 194,620       |
| Total tons .....               | 10,284,945        | 10,472,779    | 13,362,851    | 11,935,360    | 10,512,823    |
| Total cost .....               | \$ 85,849,065     | \$ 84,934,475 | \$ 94,838,394 | \$ 79,280,297 | \$ 58,604,204 |
| Average cost per ton .....     | \$ 8.35           | \$ 8.11       | \$ 7.10       | \$ 6.64       | \$ 5.57       |
| Rail motor cars:               |                   |               |               |               |               |
| Gasoline .....                 | gal. 81,796       | 59,555        | 97,597        | 104,761       | 81,678        |
| Diesel oil .....               | " 457,170         | 811,705       | 1,485,688     | 2,882,997     | 4,068,693     |
| Fuel oil .....                 | " —               | —             | —             | —             | —             |
| Total cost .....               | \$ 86,710         | \$ 127,324    | \$ 230,413    | \$ 439,427    | \$ 549,548    |

<sup>1</sup> Work train service only.

Note: Tonnages are based on conversion factors applied to diesel oil and fuel oil consumption. These data should be used with caution.

SOURCE: D.B.S. 52-207- Annual,  
RAILWAY TRANSPORT (1958, Part I)



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3. Persons Killed and Injured in Accidents at Highway Crossings, Year ended December 31

|                                 | Employees and passengers |       | Pedestrians |       | Riding in      |       |                |       | Total |       |
|---------------------------------|--------------------------|-------|-------------|-------|----------------|-------|----------------|-------|-------|-------|
|                                 |                          |       |             |       | Motor vehicles |       | Other vehicles |       |       |       |
|                                 | Urban                    | Rural | Urban       | Rural | Urban          | Rural | Urban          | Rural | Urban | Rural |
| Number of persons killed        |                          |       |             |       |                |       |                |       |       |       |
| Protected by gates:             |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | —     | —           | —     | 6              | —     | —              | —     | 6     | —     |
| 1955 .....                      | —                        | —     | 2           | —     | 2              | —     | —              | —     | 4     | —     |
| 1956 .....                      | —                        | —     | 1           | —     | 2              | —     | —              | —     | 3     | —     |
| 1957 .....                      | —                        | —     | 1           | 1     | —              | —     | —              | —     | 1     | 1     |
| 1958 .....                      | —                        | —     | 3           | —     | 2              | —     | —              | —     | 5     | —     |
| Protected by automatic signals: |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | —     | 5           | 1     | 4              | 14    | 1              | —     | 10    | 15    |
| 1955 .....                      | —                        | —     | 4           | —     | 20             | 7     | —              | —     | 24    | 7     |
| 1956 .....                      | —                        | —     | 2           | —     | 17             | 11    | —              | —     | 19    | 11    |
| 1957 .....                      | —                        | —     | 1           | 1     | 9              | 18    | —              | —     | 10    | 19    |
| 1958 .....                      | —                        | —     | 2           | —     | 8              | 14    | —              | —     | 10    | 14    |
| Protected by watchmen:          |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | —     | —           | —     | —              | 1     | —              | —     | —     | 1     |
| 1955 .....                      | —                        | —     | 1           | —     | —              | 1     | —              | —     | 1     | 1     |
| 1956 .....                      | —                        | —     | 1           | —     | 3              | —     | —              | —     | 4     | —     |
| 1957 .....                      | —                        | —     | —           | —     | —              | —     | —              | —     | —     | —     |
| 1958 .....                      | —                        | —     | —           | —     | —              | 1     | —              | —     | —     | 1     |
| Total at protected crossings:   |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | —     | 5           | 1     | 10             | 15    | 1              | —     | 16    | 16    |
| 1955 .....                      | —                        | —     | 7           | —     | 22             | 8     | —              | —     | 29    | 8     |
| 1956 .....                      | —                        | —     | 4           | —     | 22             | 11    | —              | —     | 26    | 11    |
| 1957 .....                      | —                        | —     | 2           | 2     | 9              | 18    | —              | —     | 11    | 20    |
| 1958 .....                      | —                        | —     | 5           | —     | 10             | 15    | —              | —     | 15    | 15    |
| Unprotected:                    |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | 2     | 2           | 1     | 24             | 91    | —              | —     | 26    | 94    |
| 1955 .....                      | —                        | 1     | 2           | 1     | 25             | 91    | —              | —     | 27    | 93    |
| 1956 .....                      | —                        | 2     | 3           | 5     | 31             | 112   | —              | 2     | 34    | 121   |
| 1957 .....                      | —                        | —     | 2           | 3     | 35             | 106   | —              | 1     | 37    | 110   |
| 1958 .....                      | —                        | —     | 1           | 1     | 26             | 108   | —              | 1     | 27    | 110   |
| Grand total:                    |                          |       |             |       |                |       |                |       |       |       |
| 1954 .....                      | —                        | 2     | 7           | 2     | 34             | 106   | 1              | —     | 42    | 110   |
| 1955 .....                      | —                        | 1     | 9           | 1     | 47             | 99    | —              | —     | 56    | 101   |
| 1956 .....                      | —                        | 2     | 7           | 5     | 53             | 123   | —              | 2     | 60    | 132   |
| 1957 .....                      | —                        | —     | 4           | 5     | 44             | 124   | —              | 1     | 48    | 130   |
| 1958 .....                      | —                        | —     | 6           | 1     | 36             | 123   | —              | 1     | 42    | 125   |

SOURCE: D.B.S. 52-207- Annual,  
RAILWAY TRANSPORT (1958, Part I)







## RAILWAY TRANSPORT

TABLE 3. Passenger Car Miles for the Year Ended December 31, 1958 — Continued

| No. | Name of railway                                  | In trains<br>drawn by       | Express car miles    |                        |
|-----|--|-----------------------------|----------------------|------------------------|
|     |  |                             | In freight<br>trains | In passenger<br>trains |
| 1   | Algoma Central and Hudson Bay .....              | Locomotive .....            | 172                  | 194,366                |
| 2   | Alma and Jonquieres .....                        | " .....                     | —                    | —                      |
| 3   | British Columbia Electric .....                  | Motor unit .....            | —                    | —                      |
| 4   | Canada and Gulf Terminal .....                   | Locomotive .....            | —                    | —                      |
|     |  | Motor unit car .....        | —                    | —                      |
|     |  | Total .....                 | —                    | —                      |
| 5   | Canada Southern (Lessee N.Y.C.) .....            | Locomotive .....            | —                    | —                      |
| 6   | Canadian National .....                          | Locomotive .....            | 6,144,955            | 46,015,286             |
|     |  | Motor unit car .....        | —                    | 826                    |
|     |  | Total .....                 | 6,144,955            | 46,016,112             |
| 7   | Canadian Pacific .....                           | Locomotive .....            | 2,727,079            | 32,906,413             |
|     |  | Motor unit car .....        | —                    | 9,258                  |
|     |  | Total .....                 | 2,727,079            | 32,915,671             |
| 8   | Chesapeake and Ohio (Pere Marquette Dist.) ..... | Locomotive .....            | 7,289                | —                      |
| 9   | Cumberland Railway and Coal Co. ....             | " .....                     | —                    | —                      |
| 12  | Grand Falls Central .....                        | " .....                     | —                    | —                      |
| 13  | Great Northern .....                             | " .....                     | —                    | —                      |
| 14  | Greater Winnipeg Water District .....            | Motor unit car .....        | —                    | —                      |
| 17  | London and Port Stanley .....                    | Locomotive .....            | 39,248               | —                      |
| 19  | Maritime Coal, Railway and Power Co. ....        | " .....                     | —                    | —                      |
| 20  | Midland Railway of Manitoba .....                | " .....                     | —                    | —                      |
| 21  | Napierville Junction .....                       | " .....                     | 891                  | 59,296                 |
| 22  | Northern Alberta .....                           | " .....                     | 16,165               | 1,073,256              |
| 23  | Ontario Northland .....                          | " .....                     | —                    | —                      |
| 24  | Pacific Great Eastern .....                      | Locomotive .....            | 197,906              | 25,101                 |
|     |  | Motor unit car .....        | —                    | —                      |
|     |  | Total .....                 | 197,906              | 25,101                 |
| 26  | Quebec North Shore and Labrador .....            | Locomotive .....            | —                    | —                      |
| 27  | Roberval and Saguenay .....                      | " .....                     | 10,761               | —                      |
| 28  | St. Lawrence and Adirondack .....                | " .....                     | —                    | —                      |
| 30  | Sydney and Louisburg .....                       | " .....                     | 2,000                | —                      |
| 31  | Toronto, Hamilton and Buffalo .....              | " .....                     | —                    | 101,916                |
| 34  | Wabash (in Canada) .....                         | " .....                     | 487                  | —                      |
| 35  | White Pass and Yukon Route (lines in Canada) ... | " .....                     | —                    | —                      |
| 36  | <b>Total</b> .....                               | <b>Locomotive</b> .....     | <b>9,146,953</b>     | <b>80,375,634</b>      |
|     |  | <b>Motor unit car</b> ..... | <b>—</b>             | <b>10,084</b>          |
|     |  | <b>Total</b> .....          | <b>9,146,953</b>     | <b>80,385,718</b>      |
| 37  | Canadian National (Canada and U.S.) .....        | Locomotive .....            | <sup>6</sup>         | <sup>6</sup>           |
|     |  | Motor unit car .....        | —                    | —                      |
|     |  | Total .....                 | —                    | —                      |

<sup>6</sup> Included with "Other head-end train car miles".

## OPERATING AND TRAFFIC STATISTICS

TABLE 3. Passenger Car Miles for the Year Ended December 31, 1958 — Continued

| Express car miles            |                    | Other head-end car miles |                     |                              |                    | No. |
|------------------------------|--------------------|--------------------------|---------------------|------------------------------|--------------------|-----|
| Total transportation service | Work train service | In freight trains        | In passenger trains | Total transportation service | Work train service |     |
| 194,538                      | —                  | 173                      | 194,367             | 194,540                      | —                  | 1   |
| —                            | —                  | —                        | —                   | —                            | —                  | 2   |
| —                            | —                  | —                        | —                   | —                            | —                  | 3   |
| —                            | —                  | —                        | —                   | —                            | —                  | 4   |
| —                            | —                  | —                        | —                   | —                            | —                  | —   |
| —                            | —                  | 76,003                   | 6,272,725           | 6,348,728                    | —                  | 5   |
| 52,160,241                   | 1,351              | 5,189,439                | 36,369,864          | 41,559,303                   | 41,658             | 6   |
| 826                          | —                  | —                        | 907                 | 907                          | —                  | —   |
| 52,161,067                   | 1,351              | 5,189,439                | 36,370,771          | 41,560,210                   | 41,658             | —   |
| 35,633,492                   | —                  | 1,680,076                | 20,272,715          | 21,952,791                   | —                  | 7   |
| 9,258                        | —                  | —                        | 5,704               | 5,704                        | —                  | —   |
| 35,642,750                   | —                  | 1,680,076                | 20,278,419          | 21,958,495                   | —                  | —   |
| 7,289                        | —                  | —                        | —                   | —                            | —                  | 8   |
| —                            | —                  | —                        | —                   | —                            | —                  | 9   |
| —                            | —                  | —                        | —                   | —                            | —                  | 12  |
| —                            | —                  | —                        | —                   | —                            | —                  | 13  |
| —                            | —                  | —                        | —                   | —                            | —                  | 14  |
| 39,248                       | —                  | —                        | —                   | —                            | —                  | 17  |
| —                            | —                  | —                        | —                   | —                            | —                  | 19  |
| —                            | —                  | —                        | —                   | —                            | —                  | 20  |
| 60,187                       | —                  | —                        | 100,359             | 100,359                      | 54                 | 21  |
| 1,089,421                    | —                  | 2,028                    | 664,266             | 666,294                      | —                  | 22  |
| —                            | —                  | 292,257                  | 1,650,037           | 1,942,294                    | —                  | 23  |
| 223,007                      | 103                | —                        | —                   | —                            | —                  | 24  |
| —                            | —                  | —                        | —                   | —                            | —                  | —   |
| 223,007                      | 103                | —                        | —                   | —                            | —                  | —   |
| —                            | —                  | —                        | 626,804             | 626,804                      | —                  | 26  |
| 10,761                       | —                  | —                        | —                   | —                            | —                  | 27  |
| —                            | —                  | 68                       | 156                 | 224                          | —                  | 28  |
| 2,000                        | —                  | 2,000                    | —                   | 2,000                        | —                  | 30  |
| 101,916                      | —                  | —                        | 149,275             | 149,275                      | —                  | 31  |
| 487                          | —                  | —                        | —                   | —                            | —                  | 34  |
| —                            | —                  | —                        | —                   | —                            | —                  | 35  |
| 89,522,587                   | 1,454              | 7,242,044                | 66,300,568          | 73,542,612                   | 41,712             | 36  |
| 10,084                       | —                  | —                        | 6,611               | 6,611                        | —                  | —   |
| 89,532,671                   | 1,454              | 7,242,044                | 66,307,179          | 73,549,223                   | 41,712             | —   |
| 6                            | 7                  | 12,652,979               | 89,737,555          | 102,390,534                  | 7                  | 37  |
| —                            | —                  | —                        | —                   | —                            | —                  | —   |
| —                            | —                  | 12,652,979               | 89,737,555          | 102,390,534                  | —                  | —   |

<sup>7</sup> Included with "Total freight train car miles"—Work train service.

SOURCE: D.B.S. 52-210, Annual,  
RAILWAY TRANSPORT (1958, Part IV)





RAILWAY TRANSPORT

TABLE 2. Railway Freight Traffic for the Year Ended December 31, 1958

| No. | Name of railway                                    | Products of agriculture — Wheat   |   |                             |                         |  |   |                                    |
|-----|--|---|---|-----------------------------|-------------------------|--|---|------------------------------------|
|     |  | Originated or loaded in Canada (including imports at lake or ocean ports) | Originated or loaded in Canada (including imports at lake or ocean ports) | Received from U.S. (rail)   |                         | Total freight carried (excluding duplications) | Terminated or unloaded in Canada (including exports at lake or ocean ports) | Delivered to U.S. rail connections |
|     |  |   |   | Destined to Canadian points | Destined to U.S. points |  |   |                                    |
|     |  |   |   |                             |                         |  |   |                                    |
|     |  | carloads  |   | tons                        |                         |  |   |                                    |
| 1   | Algoma Central and Hudson Bay .....                | —   | —   | —                           | —                       | —  | 405   | —                                  |
| 2   | Alma and Jonquieres .....                          | —   | —   | —                           | —                       | —  | 875   | —                                  |
| 3   | British Columbia Electric .....                    | —   | —   | —                           | —                       | —  | 24,249  | —                                  |
| 4   | Canada and Gulf Terminal .....                     | —   | —   | —                           | —                       | —  | —   | —                                  |
| 5   | Canada Southern (Lessee N.Y.C.) .....              | 423   | 21,463  | 488                         | 64,334                  | 86,285   | 4,869   | 66,365                             |
| 6   | Canadian National .....                            | 116,809   | 6,268,056   | 8,142                       | 106,559                 | 6,382,757                                      | 6,335,807   | 127,192                            |
| 7   | Canadian Pacific .....                             | 132,153   | 7,550,520   | 3,527                       | 2,992                   | 7,557,039                                      | 7,609,881   | 12,919                             |
| 8   | Chesapeake and Ohio (Pere Marquette District) ..   | 1,054   | 55,458  | —                           | 121,736                 | 177,194  | 39,658  | 122,436                            |
| 9   | Cumberland Railway and Coal Co. ....               | —   | —   | —                           | —                       | —  | —   | —                                  |
| 11  | Essex Terminal .....                               | 12  | 230   | —                           | —                       | 230  | 1,201   | —                                  |
| 12  | Grand Falls Central .....                          | —   | —   | —                           | —                       | —  | —   | —                                  |
| 13  | Great Northern .....                               | 1   | 61  | —                           | 60                      | 121  | 111   | 121                                |
| 14  | Greater Winnipeg Water District .....              | —   | —   | —                           | —                       | —  | —   | —                                  |
| 17  | London and Port Stanley .....                      | 58  | 3,125   | —                           | —                       | 3,125  | 3,125   | —                                  |
| 18  | Maine Central .....                                | —   | —   | —                           | —                       | —  | —   | —                                  |
| 19  | Maritime Coal, Railway and Power Co. ....          | —   | —   | —                           | —                       | —  | —   | —                                  |
| 20  | Midland Railway of Manitoba .....                  | —   | —   | —                           | —                       | —  | —   | 514                                |
| 21  | Napierville Junction .....                         | —   | —   | —                           | —                       | —  | 225   | —                                  |
| 22  | Northern Alberta .....                             | 2,490   | 158,759   | —                           | —                       | 158,759  | 38  | —                                  |
| 23  | Ontario Northland .....                            | —   | —   | —                           | —                       | —  | 340   | —                                  |
| 24  | Pacific Great Eastern .....                        | 27  | 685   | —                           | —                       | 685  | 185   | —                                  |
| 26  | Quebec North Shore and Labrador .....              | —   | —   | —                           | —                       | —  | —   | —                                  |
| 27  | Roberval and Saguenay .....                        | —   | —   | —                           | —                       | —  | —   | —                                  |
| 28  | St. Lawrence and Adirondack .....                  | 4   | 169   | —                           | —                       | 169  | 353   | —                                  |
| 30  | Sydney and Louisburg .....                         | —   | —   | —                           | —                       | —  | —   | —                                  |
| 31  | Toronto, Hamilton and Buffalo .....                | 56  | 3,022   | —                           | —                       | 3,022  | 26,742  | —                                  |
| 34  | Wabash (in Canada) .....                           | —   | —   | 46                          | 184,443                 | 184,489  | 46  | 184,443                            |
| 35  | White Pass and Yukon Route (lines in Canada) ....  | —   | —   | —                           | —                       | —  | —   | —                                  |
| 36  | Total .....  | 253,087   | 14,061,548  | 12,203                      | 480,124                 | 14,553,875                                     | 14,048,110  | 513,990                            |
|     |  | Products of agriculture — Sorghum grains                                  |   |                             |                         |  |   |                                    |
|     |  | Originated or loaded in Canada (including imports at lake or ocean ports) | Originated or loaded in Canada (including imports at lake or ocean ports) | Received from U.S. (rail)   |                         | Total freight carried (excluding duplications) | Terminated or unloaded in Canada (including exports at lake or ocean ports) | Delivered to U.S. rail connections |
|     |  |   |   | Destined to Canadian points | Destined to U.S. points |  |   |                                    |
|     |  |   |   |                             |                         |  |   |                                    |
|     |  | carloads  |   | tons                        |                         |  |   |                                    |
| 1   | Algoma Central and Hudson Bay .....                | —   | —   | —                           | —                       | —  | —   | —                                  |
| 2   | Alma and Jonquieres .....                          | —   | —   | —                           | —                       | —  | —   | —                                  |
| 3   | British Columbia Electric .....                    | —   | —   | —                           | —                       | —  | —   | —                                  |
| 4   | Canada and Gulf Terminal .....                     | —   | —   | —                           | —                       | —  | —   | —                                  |
| 5   | Canada Southern (Lessee N.Y.C.) .....              | —   | —   | —                           | 310                     | 310  | —   | 310                                |
| 6   | Canadian National .....                            | 4   | 89  | 796                         | 1,035                   | 1,920  | 903   | 1,050                              |
| 7   | Canadian Pacific .....                             | 49  | 1,584   | 333                         | 1,754                   | 3,671  | 1,687   | 1,754                              |
| 8   | Chesapeake and Ohio (Pere Marquette District) .... | —   | —   | —                           | 488                     | 488  | —   | 488                                |
| 9   | Cumberland Railway and Coal Co. ....               | —   | —   | —                           | —                       | —  | —   | —                                  |
| 11  | Essex Terminal .....                               | —   | —   | —                           | —                       | —  | —   | —                                  |
| 12  | Grand Falls Central .....                          | —   | —   | —                           | —                       | —  | —   | —                                  |
| 13  | Great Northern .....                               | —   | —   | —                           | —                       | —  | —   | —                                  |
| 14  | Greater Winnipeg Water District .....              | —   | —   | —                           | —                       | —  | —   | —                                  |
| 17  | London and Port Stanley .....                      | —   | —   | —                           | —                       | —  | —   | —                                  |
| 18  | Maine Central .....                                | —   | —   | —                           | —                       | —  | —   | —                                  |
| 19  | Maritime Coal, Railway and Power Co. ....          | —   | —   | —                           | —                       | —  | —   | —                                  |
| 20  | Midland Railway of Manitoba .....                  | —   | —   | —                           | —                       | —  | —   | —                                  |
| 21  | Napierville Junction .....                         | —   | —   | —                           | —                       | —  | —   | —                                  |
| 22  | Northern Alberta .....                             | —   | —   | —                           | —                       | —  | —   | —                                  |
| 23  | Ontario Northland .....                            | —   | —   | —                           | —                       | —  | —   | —                                  |
| 24  | Pacific Great Eastern .....                        | —   | —   | —                           | —                       | —  | —   | —                                  |
| 26  | Quebec North Shore and Labrador .....              | —   | —   | —                           | —                       | —  | —   | —                                  |
| 27  | Roberval and Saguenay .....                        | —   | —   | —                           | —                       | —  | —   | —                                  |
| 28  | St. Lawrence and Adirondack .....                  | —   | —   | —                           | —                       | —  | —   | —                                  |
| 30  | Sydney and Louisburg .....                         | —   | —   | —                           | —                       | —  | —   | —                                  |
| 31  | Toronto, Hamilton and Buffalo .....                | —   | —   | —                           | —                       | —  | —   | —                                  |
| 34  | Wabash (in Canada) .....                           | —   | —   | —                           | 12,156                  | 12,156   | —   | 12,156                             |
| 35  | White Pass and Yukon Route (lines in Canada) ....  | —   | —   | —                           | —                       | —  | —   | —                                  |
| 36  | Total .....  | 53  | 1,673   | 1,129                       | 15,743                  | 18,545   | 2,590   | 15,738                             |



FREIGHT CARRIED BY PRINCIPAL COMMODITY CLASSES

TABLE 2. Railway Freight Traffic for the Year Ended December 31, 1958

| Products of agriculture — Corn  |   |                             |                         |  |   |                                    |     |
|---|---|-----------------------------|-------------------------|--|---|------------------------------------|-----|
| Originated or loaded in Canada (including imports at lake or ocean ports) | Originated or loaded in Canada (including imports at lake or ocean ports) | Received from U.S. (rail)   |                         | Total freight carried (excluding duplications) | Terminated or unloaded in Canada (including exports at lake or ocean ports) | Delivered to U.S. rail connections | No. |
|   |   | Destined to Canadian points | Destined to U.S. points |  |   |                                    |     |
| carloads  |   | tons                        |                         |  |   |                                    |     |
| —   | —   | —                           | —                       | —  | —   | —                                  | 1   |
| —   | —   | —                           | —                       | —  | 137   | —                                  | 2   |
| 1   | 17  | 12,456                      | —                       | 12,473   | 9,343   | —                                  | 3   |
| —   | —   | —                           | —                       | —  | —   | —                                  | 4   |
| 431   | 19,550  | 5,891                       | 57,066                  | 82,507   | 4,174   | 57,640                             | 5   |
| 2,058   | 96,355  | 29,445                      | 202,131                 | 327,931  | 116,451   | 232,812                            | 6   |
| —   | —   | —                           | —                       | —  | —   | —                                  | 7   |
| 1,265   | 60,159  | 27,746                      | 148,516                 | 236,421  | 96,671  | 166,697                            | 8   |
| 706   | 29,784  | 226                         | 65,912                  | 95,922   | 1,112   | 66,052                             | 9   |
| —   | —   | —                           | —                       | —  | —   | —                                  | 10  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 11  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 12  |
| 2   | 55  | 11,257                      | —                       | 11,312   | 10,523  | —                                  | 13  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 14  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 15  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 16  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 17  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 18  |
| —   | —   | 211                         | —                       | 211  | 59  | —                                  | 19  |
| —   | —   | —                           | —                       | —  | —   | 25                                 | 20  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 21  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 22  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 23  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 24  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 25  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 26  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 27  |
| 133   | 7,398   | 106                         | —                       | 7,504  | 8,902   | 56                                 | 28  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 29  |
| —   | —   | —                           | —                       | —  | 1,045   | —                                  | 30  |
| 3   | 74  | —                           | 155,207                 | 155,281  | —   | 155,281                            | 31  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 32  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 33  |
| 4,589   | 213,392   | 87,338                      | 628,832                 | 929,562  | 248,417   | 678,563                            | 34  |

| Products of agriculture — Oats  |   |                             |                         |  |   |                                    |     |
|---|---|-----------------------------|-------------------------|--|---|------------------------------------|-----|
| Originated or loaded in Canada (including imports at lake or ocean ports) | Originated or loaded in Canada (including imports at lake or ocean ports) | Received from U.S. (rail)   |                         | Total freight carried (excluding duplications) | Terminated or unloaded in Canada (including exports at lake or ocean ports) | Delivered to U.S. rail connections | No. |
|   |   | Destined to Canadian points | Destined to U.S. points |  |   |                                    |     |
| carloads  |   | tons                        |                         |  |   |                                    |     |
| —   | —   | —                           | —                       | —  | 127   | —                                  | 1   |
| —   | —   | —                           | —                       | —  | 1,148   | —                                  | 2   |
| 2   | 70  | —                           | —                       | 70   | 7,384   | 40                                 | 3   |
| —   | —   | —                           | —                       | —  | 93  | —                                  | 4   |
| 4   | 148   | 1,289                       | 5,986                   | 7,423  | 757   | 19,342                             | 5   |
| 18,387  | 779,513   | 178                         | 26,029                  | 805,720  | 768,575   | 76,455                             | 6   |
| —   | —   | —                           | —                       | —  | —   | —                                  | 7   |
| 11,252  | 520,088   | 181                         | 25,703                  | 545,972  | 538,934   | 44,458                             | 8   |
| 48  | 1,774   | 417                         | 16,546                  | 18,737   | 68  | 17,042                             | 9   |
| —   | —   | —                           | —                       | —  | —   | —                                  | 10  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 11  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 12  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 13  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 14  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 15  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 16  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 17  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 18  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 19  |
| —   | —   | —                           | —                       | —  | —   | 686                                | 20  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 21  |
| 2,018   | 99,118  | —                           | —                       | 99,118   | —   | —                                  | 22  |
| 2   | 13  | —                           | —                       | 13   | 1,011   | —                                  | 23  |
| 25  | 637   | —                           | —                       | 637  | 334   | —                                  | 24  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 25  |
| —   | —   | —                           | —                       | —  | 25  | —                                  | 26  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 27  |
| 1   | 43  | 26                          | —                       | 69   | 43  | —                                  | 28  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 29  |
| 34  | 1,236   | —                           | —                       | 1,236  | 643   | —                                  | 30  |
| —   | —   | —                           | 11,521                  | 11,521   | —   | 11,521                             | 31  |
| —   | —   | —                           | —                       | —  | —   | —                                  | 32  |
| 31,773  | 1,402,640   | 2,091                       | 85,785                  | 1,490,516                                      | 1,319,142   | 169,544                            | 33  |

SOURCE: D.B.S. 52-211- Annual,  
RAILWAY TRANSPORT (1958, Part V)







## RAILWAY TRANSPORT

TABLE 1. Employees and their Compensation, 1958—Canadian National Railways

| No. | Division   | Number of<br>employees<br>(monthly<br>average) <sup>1</sup> | Time<br>on<br>duty<br>(hours) | Total<br>compen-<br>sation | Average<br>hours<br>worked | Average salaries<br>and wages |              |
|-----|--|---|-------------------------------|----------------------------|----------------------------|-------------------------------|--------------|
|     |  |   |                               |                            |                            | Per<br>hour                   | Per<br>year  |
|     |  |   |                               | \$                         |                            | \$                            | \$           |
|     | <b>General</b>   |   |                               |                            |                            |                               |              |
| 1   | Executives, officers and assistants .....  | 1,249   | 2,637,910                     | 9,857,288                  | 2,112                      | 3.74                          | 7,892        |
| 2   | Professional and sub-professional assistants .....   | 1,200   | 2,552,368                     | 6,221,245                  | 2,044                      | 2.44                          | 5,184        |
| 3   | Chief, assistant chief and supervisory clerks .....  | 850   | 1,762,993                     | 4,115,955                  | 2,074                      | 2.33                          | 4,842        |
| 4   | Clerks, stenographers and office machine operators .....   | 10,958  | 22,114,652                    | 39,233,652                 | 2,018                      | 1.77                          | 3,580        |
| 5   | Telephone switchboard operators, office boys and<br>sorters .....                                  | 494   | 930,735                       | 1,197,433                  | 1,884                      | 1.29                          | 2,424        |
| 6   | Janitors and other building attendants .....   | 755   | 1,459,710                     | 2,183,612                  | 1,933                      | 1.50                          | 2,892        |
| 7   | Service vehicle operators .....  | 163   | 345,239                       | 606,376                    | 2,118                      | 1.76                          | 3,720        |
| 8   | Miscellaneous trades workers .....   | 56  | 110,925                       | 204,497                    | 1,981                      | 1.84                          | 3,652        |
| 9   | Police inspectors, sergeants, special agents and<br>investigators .....                            | 114   | 231,020                       | 576,164                    | 2,026                      | 2.49                          | 5,054        |
| 10  | Constables and policemen .....   | 470   | 924,103                       | 1,791,412                  | 1,966                      | 1.94                          | 3,812        |
| 11  | Stores general foremen, foremen and assistants .....   | 160   | 322,136                       | 661,918                    | 2,013                      | 2.05                          | 4,137        |
| 12  | Storemen and stores labourers (non-clerical) .....   | 1,488   | 2,841,562                     | 4,730,694                  | 1,910                      | 1.66                          | 3,179        |
|     | <b>Total .....</b>   | <b>17,957</b>   | <b>36,233,353</b>             | <b>71,380,246</b>          | <b>2,018</b>               | <b>1.97</b>                   | <b>3,975</b> |
|     | <b>Way and Structures</b>  |   |                               |                            |                            |                               |              |
| 13  | B. & B. masters, roadmasters and assistants .....  | 410   | 869,155                       | 2,348,265                  | 2,120                      | 2.70                          | 5,727        |
| 14  | Maintenance of way and scale inspectors .....  | 48  | 105,993                       | 226,647                    | 2,208                      | 2.13                          | 4,722        |
| 15  | B. & B. department foremen .....   | 357   | 699,586                       | 1,549,050                  | 1,960                      | 2.21                          | 4,339        |
| 16  | B. & B. carpenters and bridgemen .....   | 1,552   | 3,034,113                     | 5,552,569                  | 1,955                      | 1.83                          | 3,578        |
| 17  | Blacksmiths, pipefitters and tinsmiths .....   | 186   | 366,592                       | 787,259                    | 1,971                      | 2.15                          | 4,233        |
| 18  | Masons, painters and other journeymen .....  | 563   | 1,110,576                     | 2,155,298                  | 1,973                      | 1.94                          | 3,828        |
| 19  | Helpers, B. & B. department .....  | 252   | 536,169                       | 979,570                    | 2,128                      | 1.83                          | 3,887        |
| 20  | Labourers, bridge, building and signal .....   | 449   | 893,955                       | 1,343,534                  | 1,991                      | 1.50                          | 2,992        |
| 21  | Work equipment operators and helpers .....   | 724   | 1,831,333                     | 3,632,490                  | 2,529                      | 1.98                          | 5,017        |
| 22  | Pumpmen .....  | 29  | 54,501                        | 99,267                     | 1,879                      | 1.82                          | 3,423        |
| 23  | Extra gang and snow plow foremen .....   | 224   | 674,082                       | 1,462,840                  | 3,009                      | 2.17                          | 6,531        |
| 24  | Section foremen .....  | 2,732   | 5,600,426                     | 10,352,433                 | 2,050                      | 1.85                          | 3,789        |
| 25  | Labourers, extra gang .....  | 3,569   | 9,213,544                     | 10,150,767                 | 2,582                      | 1.10                          | 2,844        |
| 26  | Sectionmen .....   | 8,545   | 16,737,037                    | 26,223,708                 | 1,959                      | 1.56                          | 3,069        |
| 27  | General and assistant general foremen and inspectors<br>(signal and electrical transmission) ..... | 38  | 80,176                        | 216,525                    | 2,110                      | 2.70                          | 5,698        |
| 28  | Foremen, signal and electrical transmission .....  | 51  | 104,320                       | 259,332                    | 2,045                      | 2.48                          | 5,085        |
| 29  | Signal and interlocker maintainers and helpers .....   | 578   | 1,169,380                     | 2,278,452                  | 2,023                      | 1.95                          | 3,942        |
| 30  | Linemen and groundmen, electrical transmission .....   | 15  | 29,693                        | 59,630                     | 1,980                      | 2.01                          | 3,975        |
|     | <b>Total .....</b>   | <b>20,322</b>   | <b>43,110,631</b>             | <b>69,677,636</b>          | <b>2,121</b>               | <b>1.62</b>                   | <b>3,429</b> |
|     | <b>Equipment</b>   |   |                               |                            |                            |                               |              |
| 31  | General foremen, foremen and assistant foremen .....   | 1,843   | 3,769,256                     | 9,184,265                  | 2,045                      | 2.44                          | 4,983        |
| 32  | Blacksmiths .....  | 251   | 473,783                       | 1,008,205                  | 1,888                      | 2.13                          | 4,017        |
| 33  | Boilermakers .....   | 484   | 913,872                       | 1,987,099                  | 1,888                      | 2.17                          | 4,106        |
| 34  | Carmen, coach and locomotive .....   | 1,523   | 2,768,722                     | 5,959,025                  | 1,818                      | 2.15                          | 3,913        |
| 35  | Carmen, freight .....  | 3,999   | 7,974,901                     | 16,461,339                 | 1,994                      | 2.06                          | 4,116        |
| 36  | Electrical workers .....   | 1,133   | 2,248,880                     | 4,815,978                  | 1,985                      | 2.14                          | 4,251        |
| 37  | Machinists .....   | 2,363   | 4,513,445                     | 9,765,698                  | 1,910                      | 2.16                          | 4,133        |
| 38  | Moulders .....   | 26  | 46,852                        | 103,039                    | 1,802                      | 2.20                          | 3,963        |
| 39  | Pipefitters and sheet metal workers .....  | 875   | 1,675,129                     | 3,619,899                  | 1,914                      | 2.16                          | 4,137        |
| 40  | Helpers to mechanics .....   | 3,334   | 6,302,812                     | 11,538,297                 | 1,890                      | 1.83                          | 3,461        |
| 41  | Apprentices .....  | 969   | 1,838,463                     | 2,876,407                  | 1,897                      | 1.56                          | 2,968        |
| 42  | Coach cleaners .....   | 925   | 1,876,573                     | 2,994,883                  | 2,029                      | 1.60                          | 3,238        |
| 43  | Classified labourers (shops, enginehouses and power<br>plants) .....                               | 2,088   | 4,263,166                     | 7,031,543                  | 2,042                      | 1.65                          | 3,368        |
| 44  | Unclassified labourers (shops, enginehouses and<br>power plants) .....                             | 962   | 1,724,622                     | 2,721,048                  | 1,793                      | 1.58                          | 2,828        |
| 45  | Stationary engineers, firemen and oilers .....   | 449   | 854,271                       | 1,542,577                  | 1,903                      | 1.80                          | 3,436        |
|     | <b>Total .....</b>   | <b>21,224</b>   | <b>41,244,747</b>             | <b>81,609,302</b>          | <b>1,943</b>               | <b>1.98</b>                   | <b>3,845</b> |

See footnote at end of table.

SOURCE: D.B.S. 52-212- Annual,  
RAILWAY TRANSPORT (1958) Part VI.



## EMPLOYMENT STATISTICS

TABLE 1. Employees and their Compensation, 1958 — Canadian National Railways — Concluded

| No.                     | Division   | Number of employees (monthly average) <sup>1</sup> | Time on duty (hours) | Total compensation             | Average hours worked | Average salaries and wages |              |
|-------------------------|--|--|----------------------|--------------------------------|----------------------|----------------------------|--------------|
|                         |  |  |                      |                                |                      | Per hour                   | Per year     |
|                         |  |  |                      | \$                             |                      | \$                         | \$           |
| <b>Transportation</b>   |  |  |                      |                                |                      |                            |              |
| 46                      | Chief train despatchers .....  | 78   | 176,251              | 601,850                        | 2,260                | 3.41                       | 7,716        |
| 47                      | Train despatchers .....  | 302  | 638,183              | 1,953,089                      | 2,113                | 3.06                       | 6,467        |
| 48                      | Supervisory agents and assistants .....                                | 323  | 684,938              | 1,495,907                      | 2,120                | 2.18                       | 4,631        |
| 49                      | Agents and caretaker agents at small stations (non-telegraphers) ..... | 155  | 343,540              | 597,094                        | 2,216                | 1.74                       | 3,852        |
| 50                      | Station agents, telegraphers and telephoners .....                     | 3,586  | 7,515,356            | 14,916,077                     | 2,096                | 1.98                       | 4,160        |
| 51                      | Levermen (non-telegraphers) at interlockers .....                      | 70   | 144,851              | 287,861                        | 2,069                | 1.99                       | 4,112        |
| 52                      | Baggage, parcel room and station attendants .....                      | 466  | 957,578              | 1,509,238                      | 2,055                | 1.58                       | 3,239        |
| 53                      | General foremen and foremen in freight sheds .....                     | 331  | 669,122              | 1,325,886                      | 2,022                | 1.98                       | 4,006        |
| 54                      | Freight handlers and freight shed operators .....                      | 2,457  | 4,369,850            | 7,540,336                      | 1,778                | 1.72                       | 3,069        |
| 55                      | Labourers .....  | 585  | 1,084,449            | 1,693,691                      | 1,854                | 1.56                       | 2,895        |
| 56                      | Dining car and restaurant inspectors .....                             | 156  | 309,825              | 725,665                        | 1,986                | 2.34                       | 4,652        |
| 57                      | Dining car stewards, chefs, cooks and waiters .....                    | 746  | 1,612,193            | 2,521,676                      | 2,161                | 1.56                       | 3,380        |
| 58                      | Restaurant managers, chefs, cooks and waiters .....                    | 399  | 1,084,803            | 1,280,367                      | 2,719                | 1.18                       | 3,209        |
| 59                      | News agents .....  | —  | —                    | —                              | —                    | —                          | —            |
| 60                      | Sleeping and parlour car conductors .....                              | 81   | 196,799              | 375,170                        | 2,430                | 1.91                       | 4,632        |
| 61                      | Porters and other train attendants .....                               | 627  | 1,390,099            | 2,013,160                      | 2,217                | 1.45                       | 3,211        |
| 62                      | Bridge operators .....   | 84   | 184,465              | 336,225                        | 2,196                | 1.82                       | 4,003        |
| 63                      | Crossing watchmen and gatemen .....                                    | 374  | 791,246              | 1,222,990                      | 2,116                | 1.55                       | 3,270        |
| 64                      | Floating equipment employees .....                                     | 408  | 745,271              | 1,570,518                      | 1,827                | 2.11                       | 3,849        |
|                         | <b>Sub-total .....</b>   | <b>11,228</b>                                      | <b>22,898,819</b>    | <b>41,966,800</b>              | <b>2,039</b>         | <b>1.83</b>                | <b>3,738</b> |
| 65                      | Yardmasters and assistants .....                                       | 372  | 1,070,890            | 2,856,223                      | 2,879                | 2.67                       | 7,678        |
| 66                      | Switch tenders .....   | 228  | 546,889              | 1,010,570                      | 2,399                | 1.85                       | 4,432        |
| 67                      | Hostlers .....   | 356  | 685,090              | 1,363,786                      | 1,924                | 1.99                       | 3,831        |
|                         | <b>Sub-total .....</b>   | <b>956</b>   | <b>2,302,869</b>     | <b>5,230,579</b>               | <b>2,409</b>         | <b>2.27</b>                | <b>5,471</b> |
| 68                      | Road passenger conductors .....  | 440  | 911,762              | 2,642,511                      | 2,072                | 2.90                       | 6,006        |
| 69                      | Road freight conductors .....  | 1,281  | 2,654,910            | 7,402,399                      | 2,073                | 2.79                       | 5,779        |
| 70                      | Road passenger brakemen and baggagemen .....                           | 1,100  | 1,866,288            | 4,738,881                      | 1,697                | 2.54                       | 4,308        |
| 71                      | Road freight brakemen .....  | 3,179  | 5,331,349            | 12,893,696                     | 1,677                | 2.42                       | 4,056        |
| 72                      | Yard foremen .....   | 1,086  | 2,517,918            | 5,996,493                      | 2,318                | 2.38                       | 5,522        |
| 73                      | Yard helpers .....   | 2,463  | 5,090,986            | 11,003,200                     | 2,067                | 2.16                       | 4,467        |
| 74                      | Road passenger engineers and motormen .....                            | 531  | 940,062              | 3,896,139                      | 1,770                | 4.14                       | 7,337        |
| 75                      | Road freight engineers and motormen .....                              | 1,541  | 2,946,456            | 9,202,584                      | 1,912                | 3.12                       | 5,972        |
| 76                      | Yard engineers and motormen .....                                      | 984  | 2,669,352            | 6,310,764                      | 2,713                | 2.36                       | 6,413        |
| 77                      | Road passenger firemen and helpers .....                               | 514  | 835,086              | 2,964,190                      | 1,625                | 3.55                       | 5,767        |
| 78                      | Road freight firemen and helpers .....                                 | 1,720  | 2,946,605            | 7,607,581                      | 1,713                | 2.58                       | 4,423        |
| 79                      | Yard firemen and helpers .....   | 1,086  | 2,657,358            | 5,348,788                      | 2,447                | 2.01                       | 4,925        |
|                         | <b>Sub-total .....</b>   | <b>15,925</b>                                      | <b>31,368,132</b>    | <b>80,007,226</b>              | <b>1,970</b>         | <b>2.55</b>                | <b>5,024</b> |
|                         | <b>Total .....</b>   | <b>28,109</b>                                      | <b>56,569,820</b>    | <b>127,204,605</b>             | <b>2,013</b>         | <b>2.25</b>                | <b>4,525</b> |
|                         | <b>Total divisions 1 to 79 .....</b>                                   | <b>87,612</b>                                      | <b>177,158,551</b>   | <b>349,871,789</b>             | <b>2,022</b>         | <b>1.97</b>                | <b>3,993</b> |
| <b>Other Operations</b> |  |  |                      |                                |                      |                            |              |
| 80                      | Communications .....   | 5,829  | 12,150,861           | 21,053,870                     | 2,085                | 1.73                       | 3,612        |
| 81                      | Express .....  | 5,995  | 12,375,054           | 22,254,851                     | 2,064                | 1.80                       | 3,712        |
| 82                      | Cartage .....  | —  | —                    | —                              | —                    | —                          | —            |
| 83                      | Highway transport (rail) .....   | 840  | 1,695,053            | 2,955,209                      | 2,018                | 1.74                       | 3,518        |
| 84                      | Outside operations .....   | 3,827  | 7,921,885            | 10,960,277                     | 2,070                | 1.38                       | 2,864        |
|                         | <b>Total .....</b>   | <b>16,491</b>                                      | <b>34,142,853</b>    | <b>57,224,207</b>              | <b>2,070</b>         | <b>1.68</b>                | <b>3,470</b> |
|                         | <b>Grand total .....</b>   | <b>104,103</b>                                     | <b>211,301,404</b>   | <b>407,095,996<sup>2</sup></b> | <b>2,030</b>         | <b>1.93</b>                | <b>3,911</b> |
| 85                      | Number of female employees (monthly average) .....                     | 5,062  | —                    | —                              | —                    | —                          | —            |
| 86                      | Salaries and wages charged to operating expenses .....                 | —  | —                    | 357,564,327                    | —                    | —                          | —            |

<sup>1</sup> Average of counts made each month.<sup>2</sup> Includes \$1,010,565 paid to employees domiciled outside Canada and charged to the Canadian System.SOURCE: L.B.S. 52-212- Annual,  
RAILWAY TRANSPORT (1958, Part VI)







RAILWAY OPERATING STATISTICS

February, 1960

|   | Total 22 Railways |             | Canadian National Railways |             | Canadian Pacific Railway Company |             |
|---|-------------------|-------------|----------------------------|-------------|----------------------------------|-------------|
|   | 1960              | 1959        | 1960                       | 1959        | 1960                             | 1959        |
| Miles of road operated (monthly average).....           | 45,073.85         | 44,971.04   | 23,348.56                  | 23,262.12   | 17,094.80                        | 17,095.80   |
| Freight Traffic   |                   |             |                            |             |                                  |             |
| Tons carried-revenue freight .....(1)                   | 13,192,479        | 12,107,873  | 5,580,280                  | 5,019,681   | 4,271,642                        | 4,129,183   |
| Ton-miles - revenue freight ..... (000)                 | 5,086,853         | 4,687,359   | 2,564,943                  | 2,400,389   | 2,094,290                        | 1,913,911   |
| Ton-miles - revenue and non-revenue freight ..... (000) | 5,224,727         | 4,863,674   | 2,646,425                  | 2,501,247   | 2,146,457                        | 1,979,812   |
| Passenger Traffic                                       |                   |             |                            |             |                                  |             |
| Revenue passengers .....(1)                             | 1,872,817         | 1,699,208   | 1,103,741                  | 927,943     | 660,240                          | 652,936     |
| Revenue passenger-miles ..... (000)                     | 164,150           | 155,513     | 81,692                     | 73,105      | 71,119                           | 70,079      |
| Gross Ton-Miles   |                   |             |                            |             |                                  |             |
| Freight train ..... (000)                               | 11,371,849        | 10,675,958  | 5,717,821                  | 5,455,593   | 4,586,972                        | 4,346,346   |
| Passenger train ..... (000)                             | 1,612,999         | 1,684,762   | 928,016                    | 924,171     | 569,851                          | 636,800     |
| Total ..... (000)                                       | 12,984,848        | 12,360,720  | 6,645,837                  | 6,379,764   | 5,156,823                        | 4,983,146   |
| Train-Miles   |                   |             |                            |             |                                  |             |
| Freight service.....                                    | 5,300,425         | 5,280,597   | 2,625,880                  | 2,686,319   | 2,178,373                        | 2,091,580   |
| Passenger service .....                                 | 2,874,063         | 2,959,781   | 1,600,591                  | 1,602,854   | 1,052,326                        | 1,131,504   |
| Work service .....                                      | 264,033           | 289,716     | 203,166                    | 186,897     | 46,484                           | 86,135      |
| Total .....   | 8,438,521         | 8,530,094   | 4,429,637                  | 4,476,070   | 3,277,183                        | 3,309,219   |
| Car-Miles   |                   |             |                            |             |                                  |             |
| Freight:  |                   |             |                            |             |                                  |             |
| Loaded.....   | 164,785,064       | 157,490,279 | 83,471,136                 | 82,749,413  | 66,754,156                       | 62,392,518  |
| Empty.....  | 83,546,677        | 75,775,808  | 42,043,013                 | 37,646,677  | 31,867,642                       | 30,040,800  |
| Total (including cabooses) .....                        | 253,676,036       | 238,524,531 | 128,164,893                | 123,103,460 | 100,869,794                      | 94,558,188  |
| Passenger.....  | 26,030,291        | 26,399,716  | 15,068,424                 | 14,583,687  | 9,213,036                        | 9,841,602   |
| Total transportation service.....                       | 279,706,327       | 264,924,247 | 143,233,317                | 137,687,147 | 110,082,830                      | 104,399,790 |
| Number of Employees - Railway .....                     | 144,796           | 151,086     | 79,365                     | 82,427      | 55,711                           | 59,084      |
| Pay Roll - Railway .....                                | 51,117,796        | 50,069,223  | 27,294,229                 | 26,847,327  | 19,769,253                       | 19,369,125  |
| Pay Roll Chargeable to Railway Operating Expenses ...\$ | 48,462,537        | 46,851,654  | 25,802,488                 | 24,779,083  | 18,772,151                       | 18,387,321  |

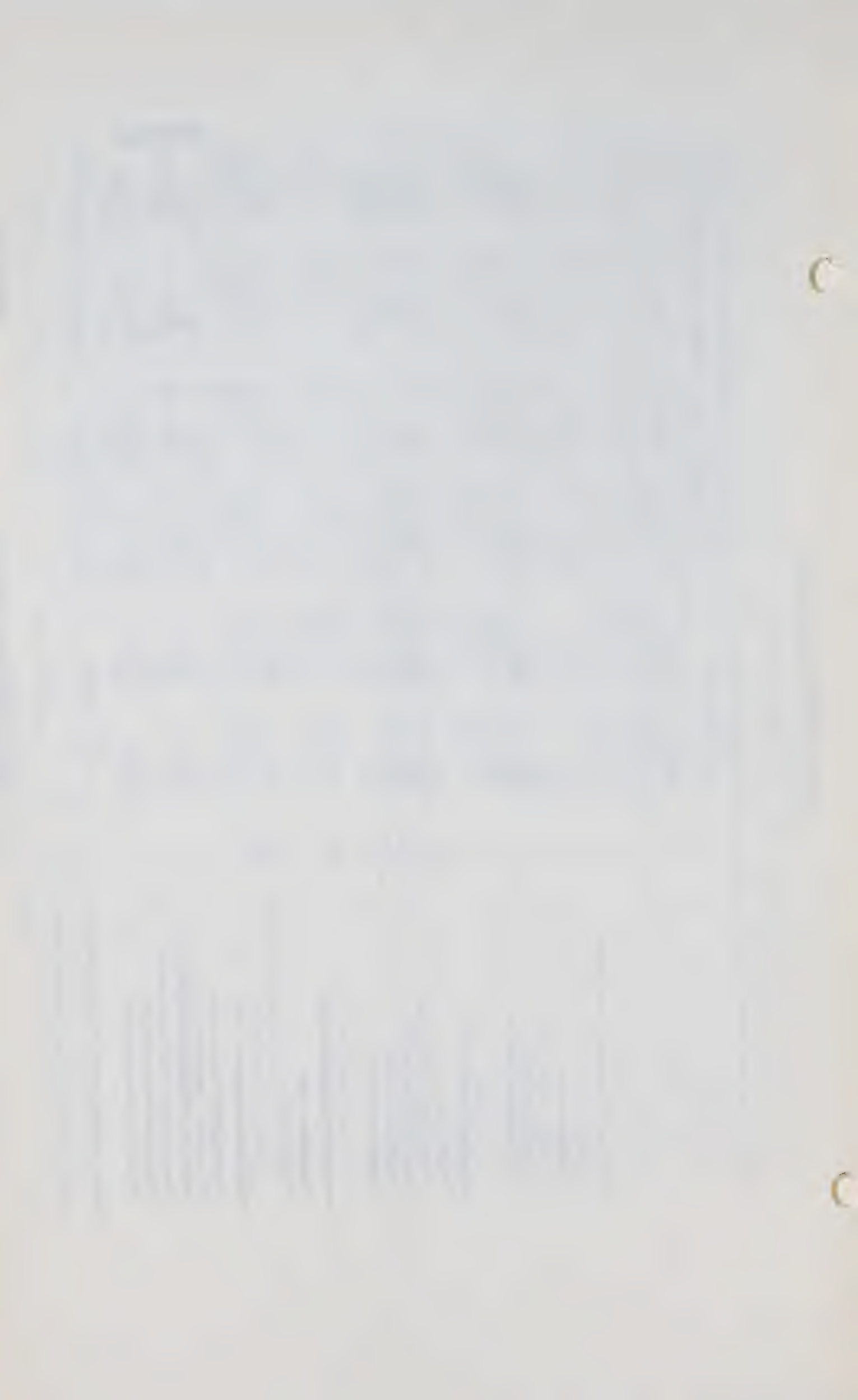
(1) Includes traffic handled by more than one road.

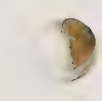
# RAILWAY OPERATING STATISTICS

February, 1960

|  | Total 22 Railways |        | Canadian National Railways |        | Canadian Pacific Railway Company |       |
|--|-------------------|--------|----------------------------|--------|----------------------------------|-------|
|  | 1960              | 1959   | 1960                       | 1959   | 1960                             | 1959  |
| <b>Averages per day per mile of road operated</b>              |                   |        |                            |        |                                  |       |
| Operating revenues .....                                       | 72.18             | 69.95  | 69.93                      | 66.12  | 75.21                            | 75.56 |
| Operating expenses .....                                       | 71.67             | 72.55  | 71.23                      | 72.35  | 72.09                            | 74.05 |
| Ton-miles — revenue freight .....                              | 3,892             | 3,723  | 3,788                      | 3,685  | 4,224                            | 3,998 |
| Ton-miles — all freight .....                                  | 3,997             | 3,863  | 3,908                      | 3,840  | 4,330                            | 4,136 |
| Passenger-miles — revenue .....                                | 126               | 124    | 121                        | 112    | 143                              | 146   |
| <b>Averages per freight train mile</b>                         |                   |        |                            |        |                                  |       |
| Freight revenue .....  | 15.65             | 14.57  | 15.97                      | 14.10  | 14.77                            | 14.86 |
| Tons carried — revenue freight .....                           | 960               | 888    | 977                        | 894    | 961                              | 915   |
| Tons carried — all freight .....                               | 986               | 921    | 1,008                      | 931    | 985                              | 947   |
| Freight cars — loaded .....                                    | 31.1              | 29.8   | 31.8                       | 30.8   | 30.6                             | 29.8  |
| Freight cars — empty .....                                     | 15.8              | 14.3   | 16.0                       | 14.0   | 14.6                             | 14.4  |
| <b>Averages per passenger train mile</b>                       |                   |        |                            |        |                                  |       |
| Passengers carried .....                                       | 57                | 53     | 51                         | 46     | 68                               | 62    |
| Passenger cars .....   | 9.1               | 8.9    | 9.4                        | 9.1    | 8.8                              | 8.7   |
| <b>Miscellaneous averages</b>                                  |                   |        |                            |        |                                  |       |
| Operating expense per train-mile .....                         | 11.10             | 10.71  | 10.89                      | 10.53  | 10.91                            | 10.71 |
| Miles hauled — revenue freight .....                           | 386               | 387    | 460                        | 478    | 490                              | 464   |
| Miles carried — revenue passengers .....                       | 88                | 92     | 74                         | 79     | 108                              | 107   |
| Tons carried per loaded freight car-mile .....                 | 31.7              | 30.9   | 31.7                       | 30.2   | 32.2                             | 31.7  |
| Revenue per ton-mile of freight .....                          | 1.631             | 1.641  | 1.635                      | 1.578  | 1.536                            | 1.624 |
| Revenue per passenger per mile .....                           | 2.766             | 3.180  | 2.667                      | 3.436  | 2.964                            | 3.070 |
| <b>Ratio of operating pay roll to operating revenues .....</b> | 51.37             | 53.19  | 54.50                      | 57.54  | 50.35                            | 50.84 |
| <b>Ratio of operating expenses to operating revenues .....</b> | 99.30             | 103.71 | 101.87                     | 109.42 | 95.85                            | 98.00 |

EXHIBIT 12







## RAIL FINANCIAL OPERATING STATISTICS

Year 1959

|                                  | Total 22 Railways    |                      | Canadian National Railways |                       | Canadian Pacific Railway Company |                    |
|----------------------------------|----------------------|----------------------|----------------------------|-----------------------|----------------------------------|--------------------|
|                                  | 1959                 | 1958r                | 1959                       | 1958                  | 1959                             | 1958               |
| <b>RAIL</b>                      |                      |                      |                            |                       |                                  |                    |
| <b>Operating Revenues</b>        |                      |                      |                            |                       |                                  |                    |
| Railway .....                    | 1,219,304,062        | 1,161,100,118        | 588,538,863                | 562,844,253           | 478,455,778                      | 467,410,853        |
| Express .....                    | 60,551,736           | 58,240,392           | 32,490,164                 | 30,682,843            | 27,642,161                       | 27,129,060         |
| Commercial Communications .....  | 48,210,879           | 43,293,794           | 27,189,000                 | 23,954,032            | 17,541,744                       | 16,368,767         |
| Highway Transport (Rail) .....   | 4,248,997            | 4,331,225            | 3,857,000                  | 3,924,527             | 275,591                          | 282,141            |
| <b>Total .....</b>               | <b>1,332,315,674</b> | <b>1,266,965,529</b> | <b>652,075,027</b>         | <b>621,405,655</b>    | <b>523,915,274</b>               | <b>511,190,821</b> |
| <b>Operating Expenses</b>        |                      |                      |                            |                       |                                  |                    |
| Railway .....                    | 1,160,290,497        | 1,130,611,860        | 587,320,455                | 578,493,515           | 442,266,855                      | 430,919,006        |
| Express .....                    | 59,950,677           | 57,599,972           | 32,083,831                 | 30,222,719            | 27,492,161                       | 26,971,560         |
| Commercial Communications .....  | 41,701,809           | 38,176,836           | 22,851,810                 | 20,884,827            | 16,201,477                       | 15,018,350         |
| Highway Transport (Rail) .....   | 4,232,066            | 4,306,854            | 3,808,972                  | 3,885,542             | 290,779                          | 280,668            |
| <b>Total .....</b>               | <b>1,266,175,049</b> | <b>1,230,695,522</b> | <b>646,065,068</b>         | <b>633,486,603</b>    | <b>486,251,272</b>               | <b>473,189,584</b> |
| <b>Net Rail Operating Income</b> |                      |                      |                            |                       |                                  |                    |
| Railway .....                    | 59,013,565           | 30,488,258           | 1,218,408                  | Dr. 15,649,262        | 36,188,923                       | 36,491,847         |
| Express .....                    | 601,059              | 640,420              | 406,333                    | 460,124               | 150,000                          | 157,500            |
| Commercial Communications .....  | 6,509,070            | 5,116,958            | 4,337,190                  | 3,069,205             | 1,340,267                        | 1,350,417          |
| Highway Transport (Rail) .....   | 16,931               | 24,371               | 48,028                     | 38,985                | Dr. 15,188                       | 1,473              |
| <b>Total .....</b>               | <b>66,140,625</b>    | <b>36,270,007</b>    | <b>6,009,959</b>           | <b>Dr. 12,080,948</b> | <b>37,664,002</b>                | <b>38,001,237</b>  |

r Revised.

SOURCE: D.B.S. 52-206, Annual,  
RAILWAY OPERATING STATISTICS (Year 1959)

RAILWAY FINANCIAL OPERATING STATISTICS

Year 1959

|                                       | Total 22 Railways |               | Canadian National Railways |                | Canadian Pacific Railway Company |               |
|---------------------------------------|-------------------|---------------|----------------------------|----------------|----------------------------------|---------------|
|                                       | 1959              | 1958r         | 1959                       | 1958           | 1959                             | 1958          |
| RAILWAY                               |                   |               |                            |                |                                  |               |
| Operating Revenues                    | \$                | \$            | \$                         | \$             | \$                               | \$            |
| Freight .....                         | 1,054,253,137     | 994,676,896   | 507,199,612                | 481,895,409    | 406,485,538                      | 393,823,285   |
| Passenger .....                       | 73,571,324        | 77,300,074    | 36,827,078                 | 38,005,937     | 33,212,415                       | 35,394,437    |
| Sleeping and parlour car .....        | 10,766,017        | 10,434,059    | 4,850,843                  | 4,269,010      | 5,470,509                        | 5,888,005     |
| Mail .....                            | 17,679,089        | 15,170,641    | 10,134,264                 | 8,255,788      | 5,913,676                        | 5,530,364     |
| Express .....                         | 22,997,401        | 22,275,753    | 11,728,662                 | 11,371,180     | 8,965,064                        | 8,928,441     |
| Switching .....                       | 7,894,635         | 8,218,922     | 3,505,997                  | 3,564,043      | 2,561,106                        | 2,769,017     |
| Incidental .....                      | 28,772,536        | 30,449,002    | 13,234,396                 | 14,392,323     | 13,924,643                       | 13,796,177    |
| All other .....                       | 3,369,923         | 2,574,771     | 1,058,011                  | 1,090,563      | 1,922,827                        | 1,281,127     |
| Total .....                           | 1,219,304,062     | 1,161,100,118 | 588,538,863                | 562,844,253    | 478,455,778                      | 467,410,853   |
| Operating Expenses                    |                   |               |                            |                |                                  |               |
| Road maintenance .....                | 259,155,181       | 248,073,793   | 139,347,733                | 134,859,806    | 87,215,467                       | 83,601,598    |
| Equipment maintenance .....           | 255,433,334       | 253,401,666   | 138,005,425                | 137,658,099    | 99,042,444                       | 97,429,770    |
| Traffic .....                         | 29,024,086        | 27,199,923    | 14,115,295                 | 13,323,166     | 13,056,824                       | 12,082,382    |
| Transportation (railway line) .....   | 441,362,609       | 438,556,669   | 230,335,567                | 230,657,518    | 169,975,427                      | 168,780,654   |
| Miscellaneous railway operations .... | 14,787,822        | 14,824,857    | 5,745,461                  | 5,609,621      | 8,454,055                        | 8,624,626     |
| General .....                         | 99,626,081        | 95,735,151    | 54,976,800                 | 53,502,964     | 35,708,136                       | 34,024,695    |
| Equipment rents .....                 | Cr. 224,963       | 2,259,573     | Cr. 6,663,012              | Cr. 7,659,340  | Cr. 3,313,637                    | Cr. 2,676,069 |
| Joint facility rents .....            | 2,236,255         | 2,055,311     | Cr. 365,388                | Cr. 290,783    | 1,604,285                        | 1,393,252     |
| Railway tax accruals .....            | 58,890,092        | 48,504,917    | 11,822,574                 | 10,832,464     | 30,523,854                       | 27,658,098    |
| Total .....                           | 1,160,290,497     | 1,130,611,860 | 587,320,455                | 578,493,515    | 442,266,855                      | 430,919,006   |
| Net Railway Operating Income .....    | 59,013,565        | 30,488,258    | 1,218,408                  | Dr. 15,649,262 | 36,188,923                       | 36,491,847    |

r Revised.





CANADIAN PACIFIC RAILWAY COMPANY

TABLE 4. Capital Expended

| Year                    | Railway rolling stock and inland steamships <sup>1</sup> | Improvements on leased property | Stocks and bonds leased railway companies | Steamships     | Hotel, communication and miscellaneous property | Investments in controlled and other companies | Net change in working capital, reserves and other B/S accounts | Dividends               | Grand total    |
|-------------------------|--|---------------------------------|---|----------------|---|---|--|-------------------------|----------------|
|                         |  |                                 |   |                | dollars   |   |  |                         |                |
| 1923.....               | 14,953,488   | 3,474,150                       | 2,008,900                                 | 173,083        | 3,337,914                                       | Cr. 302,481                                   | Cr. 58,312,307 <sup>2</sup>                                    | 29,675,010              | Cr. 4,992,243  |
| 1924.....               | 14,973,901   | Cr. 3,096,605                   | 7,010,000                                 | 186,296        | 1,580,473                                       | 551,839                                       | 30,524,199   | 29,993,341              | 81,723,444     |
| 1925.....               | 6,207,059  | 361,998                         | 100,200                                   | 111,187        | 1,849,050                                       | 6,160,455                                     | Cr. 10,815,698   | 30,005,944              | 33,980,195     |
| 1926.....               | 10,476,385   | 886,619                         | —   | 1,860,514      | 3,113,203                                       | 2,044,133                                     | 17,930,474   | 30,005,944              | 66,317,272     |
| 1927.....               | 12,830,998   | 1,328,545                       | 1,136,000                                 | 14,473,514     | 8,122,543                                       | 2,610,387                                     | Cr. 5,923,031  | 30,005,944              | 64,582,900     |
| 1928.....               | 24,945,321   | 2,550,534                       | 1,580,000                                 | 9,715,262      | 9,529,995                                       | 3,455,926                                     | Cr. 2,803,980  | 33,421,180              | 82,394,238     |
| 1929.....               | 58,262,484   | 3,861,572                       | 3,620,000                                 | 14,685,156     | 13,376,827                                      | 7,832,564                                     | 25,841,436   | 35,424,790              | 162,904,829    |
| 1930.....               | 25,494,769   | 3,807,017                       | 5,447,691                                 | 15,985,865     | 9,538,725                                       | 10,262,628                                    | Cr. 10,480,424   | 38,248,531              | 98,304,802     |
| 1931.....               | 19,537,679   | 8,080,475                       | 7,565,784                                 | 2,262,731      | 3,075,918                                       | Cr. 5,402,559                                 | Cr. 17,939,643   | 22,160,697              | 39,291,082     |
| 1932.....               | 2,201,279  | 885,739                         | 1,120,000                                 | 10,362         | 253,611   | 4,737,230                                     | 2,023,141  | 2,745,139               | 13,976,501     |
| 1933.....               | Cr. 1,167,256  | 199,455                         | 465,000                                   | 28,640         | 105,698   | 11,072,421                                    | 14,467,603   | —                       | 25,171,561     |
| 1934.....               | Cr. 5,135,641  | 1,387,424                       | 2,521,000                                 | Cr. 4,379,264  | 255,837   | 1,076,489                                     | Cr. 5,960,050  | —                       | Cr. 10,234,205 |
| 1935.....               | Cr. 1,159,555  | Cr. 1,061,439                   | Cr. 3,387,731                             | Cr. 7,037,837  | Cr. 139,262                                     | 7,159,074                                     | 6,057,834  | —                       | 431,084        |
| 1936.....               | 2,236,771  | Cr. 1,238,954                   | Cr. 1,911,868                             | Cr. 234,503    | 1,977,991 <sup>3</sup>                          | 4,527,994                                     | 5,395,059  | —                       | 10,752,490     |
| 1937.....               | 16,404,543   | Cr. 395,485                     | Cr. 998,991                               | 105,810        | 823,952   | 5,700,134                                     | Cr. 1,546,852  | 1,372,569               | 21,466,680     |
| 1938.....               | 10,691,723   | 913,650                         | 1,120                                     | 7,555          | 1,091,054                                       | 11,868,417                                    | Cr. 11,869,447   | 2,745,138               | 15,449,210     |
| 1939.....               | Cr. 7,304,136  | Cr. 815,572                     | 18  | 112,346        | Cr. 3,647,801                                   | Cr. 13,588,839                                | 33,789,578   | —                       | 8,545,594      |
| 1940.....               | 5,449,302 <sup>4</sup>                                   | 1,158,199                       | —   | Cr. 23,055,913 | 739,012   | Cr. 3,049,311                                 | 15,055,420   | 5,042,782               | 1,339,491      |
| 1941.....               | 7,169,716  | 763,149                         | Cr. 1,401,988                             | Cr. 2,535,491  | 1,972,836                                       | 1,986,531                                     | Cr. 7,077,690  | 5,042,782               | 5,919,845      |
| 1942 <sup>5</sup> ..... | 5,434,749  | 1,562,107                       | Cr. 780,127                               | Cr. 26,364,037 | 107,588   | 6,054,575                                     | 16,593,159   | 5,042,782               | 7,650,796      |
| 1943.....               | 9,859,817  | Cr. 2,026,947                   | Cr. 2,999,692                             | Cr. 15,914,099 | 923,070   | 8,849,593                                     | 14,605,640   | 5,042,782               | 18,340,164     |
| 1944.....               | 18,469,301   | 940,137                         | 379,610                                   | 796,230        | Cr. 5,360,081                                   | Cr. 8,278,564                                 | Cr. 18,120,185   | 18,442,782 <sup>6</sup> | 7,269,230      |
| 1945.....               | 12,321,620   | 1,508,726                       | 3,408,184                                 | 2,323,987      | 988,496   | Cr. 382,301                                   | Cr. 22,550,050   | 21,781,500 <sup>6</sup> | 19,400,162     |
| 1946.....               | 14,360,662   | 6,270,483                       | 689,274                                   | 9,859,596      | 279,330   | 364,972                                       | Cr. 38,101,268   | 21,307,682 <sup>6</sup> | 15,030,731     |
| 1947.....               | 25,153,213   | Cr. 2,423,599                   | Cr. 1,160                                 | 4,594,348      | Cr. 136,170                                     | 1,017,017                                     | Cr. 30,728,587   | 21,307,682 <sup>6</sup> | 23,629,942     |
| 1948.....               | 37,026,209   | 6,372,250                       | 2,591                                     | 4,873,304      | 1,212,668                                       | 1,551,827                                     | Cr. 18,216,680   | 21,307,682 <sup>6</sup> | 54,129,851     |
| 1949.....               | 46,815,588   | 3,084,736                       | 711,284                                   | 3,058,301      | 3,994,847                                       | 133,175                                       | Cr. 71,359,894   | 20,622,768 <sup>6</sup> | 7,060,805      |
| 1950.....               | 37,974,143   | 581,705                         | 25,409                                    | 2,933,598      | 1,116,500                                       | 335,285                                       | Cr. 12,252,277   | 23,488,648              | 54,203,011     |
| 1951.....               | 55,298,563   | 6,906,921                       | 71,172                                    | 1,627,884      | Cr. 803,928                                     | Cr. 1,709,249                                 | Cr. 31,056,435   | 23,428,010              | 53,762,938     |
| 1952.....               | 42,001,177   | 2,450,482                       | 112,060                                   | Cr. 4,115,259  | 3,547,420                                       | 1,170,114                                     | Cr. 6,357,920  | 23,766,846              | 62,574,920     |
| 1953.....               | 65,513,863   | 9,454,301                       | Cr. 1,183,857                             | 1,130,336      | 2,982,202                                       | 7,088,530                                     | Cr. 63,637,232   | 23,841,060              | 45,189,203     |
| 1954.....               | 67,515,913   | 7,558,259                       | 64,096                                    | 6,257,297      | 2,975,704                                       | Cr. 2,499,920                                 | Cr. 29,045,595   | 23,805,419              | 76,631,173     |
| 1955.....               | 53,302,935   | Cr. 1,099,083                   | Cr. 298,503                               | 13,366,160     | 2,492,308                                       | Cr. 3,011,099                                 | Cr. 46,137,018   | 23,928,240              | 42,543,940     |
| 1956.....               | 55,060,346   | 6,528,310                       | 301,096                                   | 5,182,135      | 4,947,246                                       | Cr. 1,840,996                                 | Cr. 53,810,082   | 27,458,833              | 43,826,888     |
| 1957.....               | 70,509,819   | 6,188,993                       | 3,615,504                                 | 4,954,552      | 10,732,767                                      | 10,901,875                                    | Cr. 93,261,169   | 24,119,432              | 37,761,773     |
| 1958.....               | 45,314,939   | 3,099,173                       | 57,228                                    | Cr. 10,237,731 | 10,860,130                                      | 26,862,556                                    | Cr. 15,364,458   | 24,286,501              | 84,878,338     |
| Total .....             | 879,001,687  | 84,852,623                      | 29,049,304                                | 26,801,915     | 97,817,673                                      | 105,310,422                                   | Cr. 500,494,429  | 646,868,440             | 1,371,207,635  |

See notes on page 18.

SOURCE: D.B.S. 52-202, Annual,  
CANADIAN PACIFIC RAILWAY COMPANY (1923-1958)

# Mathematics

## Algebra

### Linear Equations and Functions

|    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|-----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20  |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30  |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |
| 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 |
| 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 |
| 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 |
| 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 |
| 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 |

## DOMINION BUREAU OF STATISTICS

TABLE 5. Operating Statistics

| No. | Year       | Average<br>miles<br>of road<br>operated | Revenue<br>freight<br>carried | Revenue<br>freight<br>ton<br>miles | Revenue<br>passengers<br>carried | Revenue<br>passenger<br>miles | Freight<br>revenue | Passenger<br>revenue | Passenger<br>train<br>revenue <sup>6</sup> |
|-----|------------|---|-------------------------------|------------------------------------|----------------------------------|-------------------------------|--------------------|----------------------|--|
|     |            |   | '000 tons                     | '000,000                           | '000                             | '000,000                      |                    | \$'000               |  |
| 1   | 1923 ..... | 21,805                                  | 57,248                        | 18,615                             | 23,684                           | 1,447                         | 185,241            | 39,285               | 59,595                                     |
| 2   | 1924 ..... | 21,866                                  | 52,499                        | 16,990                             | 22,708                           | 1,372                         | 171,045            | 37,234               | 57,400                                     |
| 3   | 1925 ..... | 21,936                                  | 54,999                        | 18,027                             | 21,675                           | 1,380                         | 180,483            | 36,618               | 56,782                                     |
| 4   | 1926 ..... | 22,066                                  | 60,846                        | 19,243                             | 21,580                           | 1,438                         | 200,004            | 38,099               | 58,843                                     |
| 5   | 1927 ..... | 22,193                                  | 61,997                        | 19,465                             | 20,554                           | 1,483                         | 202,107            | 38,576               | 59,901                                     |
| 6   | 1928 ..... | 22,277                                  | 69,155                        | 22,588                             | 19,697                           | 1,514                         | 228,461            | 39,147               | 61,687                                     |
| 7   | 1929 ..... | 22,628                                  | 65,213                        | 19,375                             | 19,251                           | 1,401                         | 214,636            | 37,132               | 60,084                                     |
| 8   | 1930 ..... | 23,650                                  | 54,563                        | 16,910                             | 17,554                           | 1,214                         | 183,568            | 32,901               | 53,252                                     |
| 9   | 1931 ..... | 23,769                                  | 41,708                        | 14,610                             | 13,196                           | 866                           | 148,952            | 23,200               | 40,540                                     |
| 10  | 1932 ..... | 23,773                                  | 34,377                        | 12,818                             | 10,364                           | 686                           | 120,715            | 17,259               | 31,651                                     |
| 11  | 1933 ..... | 23,743                                  | 31,368                        | 11,550                             | 9,435                            | 665                           | 112,319            | 15,032               | 27,879                                     |
| 12  | 1934 ..... | 23,676                                  | 36,966                        | 12,950                             | 10,080                           | 723                           | 126,118            | 16,331               | 29,725                                     |
| 13  | 1935 ..... | 23,652                                  | 38,808                        | 13,509                             | 9,721                            | 770                           | 133,745            | 16,645               | 30,225                                     |
| 14  | 1936 ..... | 23,554                                  | 43,451                        | 14,814                             | 10,099                           | 831                           | 145,488            | 17,022               | 31,026                                     |
| 15  | 1937 ..... | 23,707                                  | 47,038                        | 15,165                             | 10,888                           | 953                           | 153,796            | 18,945               | 33,662                                     |
| 16  | 1938 ..... | 23,684                                  | 40,578                        | 14,505                             | 10,289                           | 892                           | 139,770            | 18,097               | 32,172                                     |
| 17  | 1939 ..... | 23,568                                  | 45,691                        | 17,084                             | 10,145                           | 875                           | 160,255            | 17,817               | 33,012                                     |
| 18  | 1940 ..... | 23,603                                  | 55,060                        | 21,532                             | 11,204                           | 1,125                         | 194,562            | 21,702               | 41,253                                     |
| 19  | 1941 ..... | 23,525                                  | 65,370                        | 27,200                             | 17,681                           | 1,762                         | 239,592            | 31,894               | 50,008                                     |
| 20  | 1942 ..... | 23,494                                  | 71,545                        | 31,729                             | 30,363                           | 2,708                         | 288,462            | 48,297               | 69,466                                     |
| 21  | 1943 ..... | 23,494                                  | 80,427                        | 36,327                             | 34,501                           | 3,619                         | 324,900            | 66,891               | 93,401                                     |
| 22  | 1944 ..... | 23,496                                  | 80,851                        | 36,016                             | 35,928                           | 3,697                         | 321,589            | 69,776               | 97,395                                     |
| 23  | 1945 ..... | 23,498                                  | 79,941                        | 34,600                             | 30,371                           | 3,338                         | 316,533            | 65,200               | 94,157                                     |
| 24  | 1946 ..... | 23,437                                  | 78,950                        | 30,812                             | 22,320                           | 2,289                         | 300,313            | 50,128               | 78,584                                     |
| 25  | 1947 ..... | 23,402                                  | 86,221                        | 32,945                             | 21,227                           | 1,845                         | 342,582            | 43,018               | 72,991                                     |
| 26  | 1948 ..... | 23,401                                  | 85,241                        | 32,943                             | 20,083                           | 1,755                         | 393,544            | 41,562               | 73,916                                     |
| 27  | 1949 ..... | 23,902                                  | 76,846                        | 30,922                             | 18,678                           | 1,621                         | 394,424            | 43,287               | 79,535                                     |
| 28  | 1950 ..... | 24,188                                  | 81,365                        | 31,988                             | 16,820                           | 1,408                         | 445,780            | 39,889               | 78,531                                     |
| 29  | 1951 ..... | 24,176                                  | 89,618                        | 36,435                             | 17,323                           | 1,611                         | 498,800            | 47,476               | 90,927                                     |
| 30  | 1952 ..... | 24,190                                  | 90,054                        | 38,430                             | 18,833                           | 1,635                         | 536,723            | 48,466               | 98,618                                     |
| 31  | 1953 ..... | 24,153                                  | 86,523                        | 36,678                             | 18,081                           | 1,539                         | 553,618            | 45,916               | 99,365                                     |
| 32  | 1954 ..... | 24,155                                  | 79,338                        | 32,882                             | 17,859                           | 1,472                         | 502,831            | 43,757               | 94,848                                     |
| 33  | 1955 ..... | 24,231                                  | 87,607                        | 35,677                             | 16,811                           | 1,464                         | 539,028            | 43,930               | 96,783                                     |
| 34  | 1956 ..... | 24,271                                  | 99,034                        | 41,935                             | 15,989                           | 1,501                         | 612,767            | 45,843               | 108,109                                    |
| 35  | 1957 ..... | 24,282                                  | 88,881                        | 36,674                             | 13,920                           | 1,499                         | 587,274            | 46,818               | 110,571                                    |
| 36  | 1958 ..... | 24,882                                  | 79,486                        | 35,077                             | 12,737                           | 1,269                         | 545,231            | 41,493               | 102,649                                    |

See notes on page 22.

SOURCE: D.B.S. 52-201, Annual,  
CANADIAN NATIONAL RAILWAYS (1923-1958)





SUMMARY FOR CANADA  
CLASS AND TYPE OF RATE

| TYPE OF TRAFFIC                                      | RATE                       |                  | NO. OF<br>CAR-<br>LOADS | REVENUE   | WEIGHT    | TON-MILES   | AVERAGE<br>REVENUE<br>PER<br>TON-MILE | AVERAGE<br>HAUL<br>PER TON | CAR-MILES | AVERAGE<br>REVENUE<br>PER<br>CAR-MILE |     |
|--|----------------------------|------------------|-------------------------|-----------|-----------|-------------|---------------------------------------|----------------------------|-----------|---------------------------------------|-----|
|  | CLASS                      | TYPE             |                         |           |           |             |                                       |                            |           |                                       |     |
|  |                            |                  |                         | \$        | (tons)    |             | \$                                    |                            |           | \$                                    |     |
| A. CLASS RATES                                       | 100                        | Non-Competitive  | 42                      | 15,535    | 270.2     | 240,014     | 6.47                                  | 888                        | 39,461    | .39                                   |     |
|  | 85                         | Non-Competitive  | 26                      | 4,931     | 141.0     | 76,070      | 6.48                                  | 540                        | 16,805    | .29                                   |     |
|  | 70                         | Non-Competitive  | 20                      | 15,475    | 255.9     | 242,663     | 6.38                                  | 948                        | 21,845    | .71                                   |     |
|  | 55                         | Non-Competitive  | 118                     | 63,176    | 1,492.0   | 1,384,558   | 4.56                                  | 928                        | 120,064   | .53                                   |     |
|  | 45                         | Non-Competitive  | 338                     | 167,003   | 5,825.6   | 3,884,753   | 4.30                                  | 667                        | 241,767   | .69                                   |     |
|  | 40                         | Non-Competitive  | 128                     | 68,325    | 2,977.8   | 1,740,727   | 3.93                                  | 585                        | 84,252    | .81                                   |     |
|  | 33                         | Non-Competitive  | 291                     | 62,199    | 3,141.5   | 1,765,011   | 3.52                                  | 562                        | 159,729   | .39                                   |     |
|  | 30                         | Non-Competitive  | 25                      | 10,349    | 484.4     | 430,902     | 2.40                                  | 890                        | 22,944    | .45                                   |     |
|  | 27                         | Non-Competitive  | 47                      | 15,751    | 1,225.4   | 601,815     | 2.62                                  | 491                        | 24,900    | .63                                   |     |
| TOTAL CANADIAN CLASS RATES                           |                            |                  | 1,035                   | 422,744   | 15,813.8  | 10,366,513  | 4.08                                  | 656                        | 731,767   | .58                                   |     |
| TOTAL U.S. RELATED                                   |                            | Official         | 35                      | 12,900    | 700.2     | 392,360     | 3.29                                  | 560                        | 21,542    | .60                                   |     |
| TOTAL CLASS RATES.....                               |                            |                  | 1,070                   | 435,644   | 16,514.0  | 10,758,873  | 4.05                                  | 652                        | 753,309   | .58                                   |     |
| B. COMMODITY RATES                                   | Commodity                  | Non-Competitive  | 7,591                   | 1,987,666 | 348,488.6 | 111,449,927 | 1.78                                  | 320                        | 2,925,540 | .68                                   |     |
|  |                            | Statutory        | 2,400                   | 557,363   | 131,808.7 | 112,364,376 | .50                                   | 852                        | 2,052,193 | .27                                   |     |
|  |                            | Competitive      | 5,270                   | 1,229,329 | 201,350.4 | 59,485,917  | 2.07                                  | 295                        | 1,988,672 | .62                                   |     |
|  |                            | Agreed Charge    | 2,906                   | 737,206   | 85,713.1  | 29,852,019  | 2.47                                  | 348                        | 1,202,706 | .61                                   |     |
|  | TOTAL COMMODITY RATES..... |                  |                         | 18,167    | 4,511,564 | 767,360.8   | 313,152,239                           | 1.44                       | 408       | 8,169,111                             | .55 |
| C. MULTIPLE RATES                                    | 27                         | Non-Competitive) | 1                       | ( 305)    | 44.8      | ( 11,110    | 2.75)                                 | 314                        | ( 248     | 1.23                                  |     |
|  | Commodity                  | Non-Competitive) |                         | ( 161)    |           | ( 2,957     | 5.44)                                 |                            | ( 66      | 2.44                                  |     |
|  | 45                         | Non-Competitive) | 1                       | ( 304)    | 10.0      | ( 11,230    | 2.71)                                 | 1,183                      | ( 1,123   | .27                                   |     |
|  | Commodity                  | Non-Competitive) |                         | ( 78)     |           | ( 600       | 13.00)                                |                            | ( 60      | 1.30                                  |     |
|  | 100                        | Non-Competitive) | 1                       | (1,060)   | 28.5      | ( 6,583     | 16.10)                                | 724                        | ( 231     | 4.59                                  |     |
|  | Commodity                  | Competitive )    |                         | ( 941)    |           | ( 14,051    | 6.70)                                 |                            | ( 493     | 1.91                                  |     |
|  | Commodity                  | Non-Competitive) | 1                       | ( 389)    | 40.5      | ( 18,063    | 2.15)                                 | 1,854                      | ( 446     | .87                                   |     |
|  | Commodity                  | Non-Competitive) |                         | ( 421)    |           | ( 57,024    | .74)                                  |                            | ( 1,408   | .30                                   |     |
|  | Commodity                  | Non-Competitive) | 190                     | (85,479)  | 6,826.9   | (7,025,542  | 1.22)                                 | 1,663                      | (195,747  | .44                                   |     |
|  | Commodity                  | Statutory )      |                         | ( 9,399)  |           | (4,325,587  | .22)                                  |                            | (116,863  | .08                                   |     |
| TOTAL MULTIPLE RATES.....                            |                            |                  | 194                     | 98,537    | 6,950.7   | 11,472,747  | .86                                   | 1,651                      | 316,685   | .31                                   |     |
| D. MIXED SHIPMENTS<br>AT RESPECTIVE<br>CARLOAD RATES | 100                        | Non-Competitive  |                         | 600       | 17.8      | 5,025       | 11.94                                 | 282                        |           |                                       |     |
|  | 85                         | Non-Competitive  |                         | 602       | 13.9      | 5,741       | 10.49                                 | 413                        |           |                                       |     |
|  | 70                         | Non-Competitive  |                         | 39,031    | 418.3     | 664,018     | 5.88                                  | 1,587                      |           |                                       |     |
|  | 55                         | Non-Competitive  |                         | 46,918    | 850.9     | 1,064,208   | 4.41                                  | 1,251                      |           |                                       |     |
|  | 45                         | Non-Competitive  |                         | 39,297    | 946.7     | 1,069,310   | 3.67                                  | 1,130                      |           |                                       |     |
|  | 40                         | Non-Competitive  |                         | 12,091    | 398.8     | 338,992     | 3.57                                  | 850                        |           |                                       |     |
|  | 33                         | Non-Competitive  |                         | 1,684     | 65.6      | 56,552      | 2.98                                  | 862                        |           |                                       |     |
|  | 30                         | Non-Competitive  |                         | 2,138     | 114.4     | 93,798      | 2.28                                  | 820                        |           |                                       |     |
|  | 27                         | Non-Competitive  |                         | 719       | 21.0      | 28,372      | 2.53                                  | 1,351                      |           |                                       |     |
|  | TOTAL CANADIAN CLASS RATES |                  |                         | 143,080   | 2,847.4   | 3,326,016   | 4.30                                  | 1,211                      |           |                                       |     |
|  | TOTAL U.S. RELATED         |                  |                         | Official  | 1,546     | 58.4        | 60,656                                | 2.55                       | 1,039     |                                       |     |
|  | Commodity                  | Non-Competitive  |                         | 59,413    | 2,509.5   | 2,064,913   | 2.88                                  | 823                        |           |                                       |     |
|  |                            | Statutory        |                         | 222       | 48.2      | 45,164      | .49                                   | 937                        |           |                                       |     |
|  |                            | Competitive      |                         | 50,669    | 1,318.7   | 2,257,906   | 2.24                                  | 1,712                      |           |                                       |     |
|  |                            | Agreed Charge    |                         | 24,428    | 525.7     | 916,884     | 2.66                                  | 1,744                      |           |                                       |     |
|  | TOTAL COMMODITY RATES      |                  |                         | 134,732   | 4,402.1   | 5,284,867   | 2.55                                  | 1,201                      |           |                                       |     |
| TOTAL MIXED SHIPMENTS.....                           |                            |                  | 391                     | 279,358   | 7,307.9   | 8,671,539   | 3.22                                  | 1,187                      | 463,867   | .60                                   |     |
| TOTAL CANADA - ALL TRAFFIC                           |                            |                  | 19,822                  | 5,325,103 | 798,133.4 | 344,055,398 | 1.55                                  | 431                        | 9,702,972 | .55                                   |     |

SOURCE: Board of Transport Commissioners for Canada,  
WAYBILL ANALYSIS, Carload All-Rail Traffic (1958)





COMMODITY CLASSIFICATION BY REGIONS

| NO. | COMMODITY<br>CLASSES AND<br>SPECIFIC<br>COMMODITIES | REGION   |   | NO. OF<br>CAR-<br>LOADS | REVENUE | WEIGHT    | TON-MILES  | AVERAGE<br>REVENUE<br>PER<br>TON-MILE | AVERAGE<br>HAUL<br>PER TON | CAR-MILES | AVERAGE<br>REVENUE<br>PER<br>CAR-MILE |
|-----|---|--|---|-------------------------|---------|-----------|------------|---------------------------------------|----------------------------|-----------|---------------------------------------|
|     |   | FROM   | TO  |                         |         |           |            |                                       |                            |           |                                       |
| 1   | WHEAT   | Maritime<br>Eastern<br>Eastern<br>Western<br>Western<br>Western            | Maritime<br>Maritime<br>Eastern<br>Maritime<br>Eastern<br>Western             | 1                       | 26      | 26.4      | 5,518      | .47                                   | 209                        | 209       | .12                                   |
|     |   |  |   | 97                      | 25,206  | 5,293.7   | 4,740,314  | .53                                   | 895                        | 85,229    | .30                                   |
|     |   |  |   | 282                     | 70,891  | 14,753.7  | 4,352,636  | 1.63                                  | 295                        | 81,767    | .87                                   |
|     |   |  |   | 5                       | 3,038   | 217.7     | 558,565    | .54                                   | 2,566                      | 12,596    | .24                                   |
|     |   |  |   | 24                      | 21,489  | 1,342.9   | 2,193,961  | .98                                   | 1,634                      | 39,165    | .55                                   |
|     |   |  |   | 1,674                   | 402,444 | 95,298.2  | 77,237,985 | .52                                   | 810                        | 1,357,662 | .30                                   |
|     |   |  |   | 2,083                   | 523,094 | 116,932.6 | 89,088,979 | .59                                   | 762                        | 1,576,628 | .33                                   |
| 3   | CORN  | Eastern<br>Eastern<br>Western  | Maritime<br>Eastern<br>Western  | 3                       | 1,252   | 117.6     | 73,660     | 1.70                                  | 626                        | 1,953     | .64                                   |
|     |   |  |   | 23                      | 4,169   | 1,020.5   | 114,965    | 3.63                                  | 113                        | 2,653     | 1.57                                  |
|     |   |  |   | 1                       | 967     | 62.0      | 73,222     | 1.32                                  | 1,181                      | 1,181     | .82                                   |
|     |   |  |   | 27                      | 6,388   | 1,200.1   | 261,847    | 2.44                                  | 218                        | 5,787     | 1.10                                  |
| 7   | OATS  | Maritime<br>Eastern<br>Eastern<br>Eastern<br>Western<br>Western<br>Western | Maritime<br>Maritime<br>Maritime<br>Eastern<br>Maritime<br>Eastern<br>Western | 6                       | 669     | 197.0     | 14,109     | 4.74                                  | 72                         | 438       | 1.53                                  |
|     |   |  |   | 12                      | 3,465   | 397.1     | 222,894    | 1.55                                  | 561                        | 6,908     | .50                                   |
|     |   |  |   | 51                      | 9,535   | 1,965.9   | 462,401    | 2.06                                  | 235                        | 12,018    | .79                                   |
|     |   |  |   | 6                       | 3,780   | 198.9     | 476,974    | .79                                   | 2,398                      | 14,225    | .27                                   |
|     |   |  |   | 3                       | 2,051   | 115.1     | 225,151    | .91                                   | 1,956                      | 5,818     | .35                                   |
|     |   |  |   | 145                     | 33,000  | 7,225.5   | 6,073,628  | .54                                   | 841                        | 122,119   | .27                                   |
|     |   |  |   | 223                     | 52,500  | 10,099.5  | 7,475,157  | .70                                   | 740                        | 161,526   | .33                                   |
| 9   | BARLEY  | Maritime<br>Eastern<br>Eastern<br>Western<br>Western                       | Maritime<br>Maritime<br>Eastern<br>Eastern<br>Western                         | 1                       | 104     | 40.0      | 2,000      | 5.20                                  | 50                         | 50        | 2.08                                  |
|     |   |  |   | 16                      | 5,805   | 664.5     | 388,466    | 1.49                                  | 585                        | 8,437     | .69                                   |
|     |   |  |   | 57                      | 8,128   | 2,287.3   | 310,752    | 2.62                                  | 136                        | 7,181     | 1.13                                  |
|     |   |  |   | 1                       | 367     | 30.1      | 40,755     | .90                                   | 1,354                      | 1,354     | .27                                   |
|     |   |  |   | 508                     | 119,368 | 26,638.3  | 22,945,690 | .52                                   | 861                        | 436,925   | .27                                   |
| 583 | 133,772   | 29,660.2   | 23,687,663  | .56                     | 799     | 453,947   | .29        |                                       |                            |           |                                       |
| 10  | RYE   | Eastern<br>Western   | Eastern<br>Western  | 1                       | 493     | 56.0      | 12,544     | 3.93                                  | 224                        | 224       | 2.20                                  |
|     |   |  |   | 35                      | 7,997   | 1,764.5   | 1,691,614  | .47                                   | 959                        | 33,695    | .24                                   |
|     |   |  |   | 36                      | 8,490   | 1,820.5   | 1,704,158  | .50                                   | 936                        | 33,919    | .25                                   |
| 11  | RICE  | Eastern<br>Western   | Eastern<br>Western  | 2                       | 1,113   | 53.8      | 35,485     | 3.14                                  | 660                        | 1,201     | .93                                   |
|     |   |  |   | 1                       | 786     | 40.1      | 45,072     | 1.74                                  | 1,124                      | 1,124     | .70                                   |
|     |   |  |   | 3                       | 1,899   | 93.9      | 80,557     | 2.36                                  | 858                        | 2,325     | .82                                   |
| 13  | GRAIN N.O.S.  | Eastern<br>Western<br>Western  | Eastern<br>Eastern<br>Western   | 1                       | 128     | 41.3      | 15,405     | .83                                   | 373                        | 373       | .34                                   |
|     |   |  |   | 1                       | 488     | 40.0      | 54,160     | .90                                   | 1,354                      | 1,354     | .36                                   |
|     |   |  |   | 1                       | 289     | 60.3      | 62,049     | .47                                   | 1,029                      | 1,029     | .28                                   |
|     |   |  |   | 3                       | 905     | 141.6     | 131,614    | .69                                   | 929                        | 2,756     | .33                                   |
| 15  | FLOUR, WHEAT  | Maritime<br>Eastern<br>Eastern<br>Eastern<br>Western<br>Western<br>Western | Maritime<br>Maritime<br>Eastern<br>Western<br>Maritime<br>Eastern<br>Western  | 1                       | 64      | 25.8      | 1,238      | 5.17                                  | 48                         | 48        | 1.33                                  |
|     |   |  |   | 34                      | 8,586   | 1,238.5   | 1,098,627  | .78                                   | 887                        | 31,164    | .28                                   |
|     |   |  |   | 52                      | 7,851   | 1,806.4   | 661,753    | 1.19                                  | 366                        | 19,292    | .41                                   |
|     |   |  |   | 1                       | 1,179   | 25.2      | 67,914     | 1.74                                  | 2,695                      | 2,695     | .44                                   |
|     |   |  |   | 17                      | 7,619   | 607.2     | 1,264,530  | .60                                   | 2,083                      | 35,150    | .22                                   |
|     |   |  |   | 50                      | 20,285  | 1,668.2   | 2,356,408  | .86                                   | 1,413                      | 69,979    | .29                                   |
|     |   |  |   | 56                      | 6,743   | 1,701.6   | 1,374,585  | .49                                   | 808                        | 43,641    | .15                                   |
| 211 | 52,327  | 7,072.9  | 6,825,055   | .77                     | 965     | 201,969   | .26        |                                       |                            |           |                                       |
| 19  | FLOUR EDIBLE, N.O.S.                                | Eastern<br>Western   | Eastern<br>Eastern  | 4                       | 843     | 145.1     | 45,050     | 1.87                                  | 310                        | 1,078     | .78                                   |
|     |   |  |   | 1                       | 593     | 39.0      | 67,782     | .87                                   | 1,738                      | 1,738     | .34                                   |
|     |   |  |   | 5                       | 1,436   | 184.1     | 112,832    | 1.27                                  | 613                        | 2,816     | .51                                   |

SOURCE: Board of Transport Commissioner for Canada,  
WAYBILL ANALYSIS, Carload All-Rail Traffic (1958)



Express Statistics, 1958 - Continued  
Statistique des messageries, 1958 - suite

|  | Algoma<br>Central<br>and Hudson<br>Bay Railway<br>Company | Canadian<br>National<br>Express<br>Company | Canadian<br>Pacific<br>Express<br>Company | Northern<br>Alberta<br>Railways<br>Company | Railway<br>Express<br>Agency<br>Inc. | Total       |   |
|--|---|--|---|--|--------------------------------------|-------------|---|
| <b>Financial paper issued:</b>   |   |  |   |  |                                      |             | <b>Papiers négociables émis:</b>  |
| Money orders sold - domestic and foreign. \$                                     | -   | 83,732,425                                 | 49,570,978                                | -  | -                                    | 133,303,403 | Mandats circulaires vendus - canadiens et étrangers.                                |
| Travellers' cheques sold - domestic and foreign. \$                              | -   | 781,130                                    | 8,314,973                                 | -  | -                                    | 9,096,103   | Chèques de voyage vendus - canadiens et étrangers.                                  |
| "C.O.D." cheques issued. \$  | 28,838  | 1  | 19,803,311                                | -  | 285,188                              | 20,117,337  | Chèques "C.R." émis   |
| Telegraphic transfers. \$  | -   | -  | 129,420                                   | -  | -                                    | 129,420     | Transferts de fonds par télégraphe  |
| Total. \$  | 28,838  | 84,513,555                                 | 77,818,682                                | -  | 285,188                              | 162,646,263 | Total   |
| <b>Equipment and miscellaneous physical property owned at December 31, 1958:</b> |   |  |   |  |                                      |             | <b>Equipement et diverses propriétés immobilières en mains le 31 décembre 1958:</b> |
| <b>Equipment:</b>  |   |  |   |  |                                      |             | <b>Equipement:</b>  |
| Road vehicles:   |   |  |   |  |                                      |             | Véhicules routiers:   |
| Motor trucks. No.  | -   | 930  | 937                                       | -  | 39 <sup>1</sup>                      | 1,906       | Camions motorisés   |
| Trailers (road equipment - semi-trailers and full trailers). "                   | -   | 46   | 89  | -  | -                                    | 135         | Remorques (équipement routier - semi-remorques et remorques complètes).             |
| Automobiles. "   | -   | -  | 2   | -  | -                                    | 2           | Automobiles   |
| <b>Platform vehicles:</b>  |   |  |   |  |                                      |             | <b>Véhicules de quai:</b>   |
| Trucks, hand. "  | -   | -  | 3,619                                     | 19   | 112 <sup>1</sup>                     | 4,050       | Charriots, manuels  |
| Trucks, motor driven. "  | -   | 36   | 61  | -  | 7 <sup>1</sup>                       | 104         | Charriots, motorisés  |
| Other. "   | -   | 3,217                                      | -   | -  | -                                    | 3,217       | Autres  |
| <b>Miscellaneous physical property:</b>  |   |  |   |  |                                      |             | <b>Propriétés immobilières diverses:</b>  |
| Road vehicles used in cartage services:  |   |  |   |  |                                      |             | Véhicules routiers servant au transport:  |
| Trucks. "  | 1   | -  | 427                                       | -  | -                                    | 428         | Camions   |
| Trailers. "  | -   | -  | 178                                       | -  | -                                    | 178         | Remorques   |
| Automobiles. "   | -   | -  | -   | -  | -                                    | -           | Automobiles   |
| <b>Employees, salaries and wages:</b>  |   |  |   |  |                                      |             | <b>Employés, salaires et gages:</b>   |
| Full time employees:   |   |  |   |  |                                      |             | A plein temps:  |
| Number. "  | -   | 5,995                                      | 5,330                                     | 21   | 152                                  | 11,498      | Nombre  |
| Salaries and wages. \$   | 26,350  | 22,254,851                                 | 19,486,840                                | 83,640                                     | 537,586                              | 42,389,267  | Salaires et gages   |
| Part time employees:   |   |  |   |  |                                      |             | A temps partiel:  |
| Number. "  | -   | -  | 5   | 9  | 1                                    | 9           | Nombre  |
| Salaries and wages. \$   | 15,054 <sup>1</sup>                                       | -  | 5   | 36,650                                     | 19,241                               | 70,945      | Salaires et gages   |
| Commissions paid. \$   | 2,197   | 1,545,254                                  | 1,221,490                                 | 35,843                                     | 159,212                              | 2,963,996   | Commissions versées   |
| <b>Express offices:</b>  |   |  |   |  |                                      |             | <b>Bureaux de messagerie:</b>   |
| Number in Canada at Dec. 31, 1958.   | 65  | 1,578                                      | 1,391                                     | 51   | 40                                   | 3,125       | Nombre au Canada le 31 décembre 1958.   |
| Number of offices selling money orders.  | 6   | 1,980                                      | 1,301                                     | -  | -                                    | 3,281       | Nombre de bureaux vendant des mandats circulaires.                                  |
| Number of branch offices selling money orders.                                   | -   | 2,377                                      | 3,245                                     | -  | -                                    | 5,622       | Nombre de succursales vendant des mandats circulaires.                              |
| <b>Route mileage covered:<sup>7</sup></b>  |   |  |   |  |                                      |             | <b>Lignes (en milles) exploitées<sup>7</sup>:</b>                                   |
| In Canada:   |   |  |   |  |                                      |             | Au Canada:  |
| By railway <sup>8</sup> . "  | 322.10  | 23,266.87                                  | 16,741.76                                 | 901.40                                     | 937.44                               | 42,169.57   | Par chemin de fer <sup>8</sup>  |
| By steamship lines. "  | -   | 5,714.00                                   | 791.00                                    | -  | 523.00                               | 7,028.00    | Par bateau  |
| By motor carriers lines. "   | -   | 4,598.40                                   | 741.00                                    | 27.00                                      | -                                    | 5,366.40    | Par véhicules motorisés   |
| By airlines. "   | -   | 10,190.00                                  | -   | -  | 1,194.00                             | 11,384.00   | Par avion   |
| By miscellaneous lines. "  | -   | 34.10                                      | -   | -  | -                                    | 34.10       | Par voies diverses  |
| Total. "   | 322.10  | 43,803.37                                  | 18,273.76                                 | 928.40                                     | 2,654.44                             | 65,982.07   | Total   |
| Outside Canada:  |   |  |   |  |                                      |             | A l'étranger:   |
| By railway - U.S.A. "  | -   | 43.79                                      | 254.32                                    | -  | 164,563.38                           | 164,861.49  | Par chemin de fer - Etats-Unis  |
| By steamship. "  | -   | -  | 2,679.00                                  | -  | 6,529.10                             | 9,208.10    | Sur voies océaniques  |
| Other. "   | -   | -  | -   | -  | 166,877.33                           | 166,877.33  | Autre   |
| Total. "   | -   | 43.79                                      | 2,933.32                                  | -  | 337,969.81                           | 340,946.92  | Total   |
| Grand total. "   | 322.10  | 43,847.16                                  | 21,207.08                                 | 928.40                                     | 340,624.25                           | 406,928.99  | Total général   |
| <b>Route mileage covered - by area:<sup>7</sup></b>                              |   |  |   |  |                                      |             | <b>Lignes (en milles) exploitées - par région:<sup>7</sup></b>                      |
| Newfoundland. "  | -   | 6,985.47                                   | -   | -  | -                                    | 6,985.47    | Terre-Neuve   |
| Prince Edward Island. "  | -   | 828.82                                     | -   | -  | -                                    | 828.82      | Ile-du-Prince-Edouard   |
| Nova Scotia. "   | -   | 2,638.87                                   | 288.54                                    | -  | -                                    | 2,927.41    | Nouvelle-Ecosse   |
| New Brunswick. "   | -   | 2,887.15                                   | 578.33                                    | -  | -                                    | 3,465.48    | Nouveau-Brunswick   |
| Quebec. "  | -   | 5,631.52                                   | 1,654.05                                  | -  | 263.83                               | 7,549.40    | Québec  |
| Ontario. "   | 322.10  | 9,776.88                                   | 4,244.84                                  | -  | 1,225.11                             | 15,568.93   | Ontario   |
| Manitoba. "  | -   | 3,921.82                                   | 1,746.75                                  | -  | 132.39                               | 5,800.96    | Manitoba  |
| Saskatchewan. "  | -   | 5,962.07                                   | 4,486.60                                  | -  | -                                    | 10,448.67   | Saskatchewan  |
| Alberta. "   | -   | 3,071.36                                   | 2,487.05                                  | 901.50                                     | 321.00                               | 6,780.91    | Alberta   |
| British Columbia. "  | -   | 2,099.41                                   | 2,787.60                                  | 20.90                                      | 712.11                               | 5,628.02    | Colombie-Britannique  |
| Northwest Territories. "   | -   | -  | -   | -  | -                                    | -           | Territoires du Nord-Ouest   |
| Yukon. "   | -   | -  | -   | -  | -                                    | -           | Yukon   |
| United States. "   | -   | 43.79                                      | 254.32                                    | -  | 330,403.81                           | 330,701.92  | Etats-Unis  |
| Ocean-going mileage. "   | -   | -  | 2,679.00                                  | -  | 7,566.00                             | 10,245.00   | Parcours océanique  |
| Total. "   | 322.10  | 43,847.16                                  | 21,207.08                                 | 928.40                                     | 340,624.25                           | 406,928.99  | Total   |
| <b>Accidents:</b>  |   |  |   |  |                                      |             | <b>Accidents:</b>   |
| Persons injured. No.   | -   | 470  | 254                                       | 1  | 1                                    | 726         | Personnes blessées  |
| Persons killed. "  | -   | -  | 1   | -  | -                                    | 1           | Personnes tuées   |

See footnotes at end of table. Voir renvois à la fin du tableau.

SOURCE: U.B.S. 52-204, Annual,  
EXPRESS STATISTICS (1958)





## DOMINION BUREAU OF STATISTICS

TABLE 3. Operating and Traffic Statistics 1957, Group I Carriers

|  | Canada                | Atlantic<br>Provinces | Quebec            | Ontario           | Manitoba         | Saskat-<br>chewan | Alberta           | British<br>Columbia |
|--|-----------------------|-----------------------|-------------------|-------------------|------------------|-------------------|-------------------|---------------------|
| Number reporting .....                                     | 103                   | 2                     | 23                | 42                | 7                | 3                 | 15                | 11                  |
| <b>Property account:</b>                                   |                       |                       |                   |                   |                  |                   |                   |                     |
| Land and land rights .....                                 | \$ 2,792,500          | 4,887                 | 823,638           | 1,252,043         | 87,590           | 236,664           | 139,706           | 247,772             |
| Structures—garages—warehouses—offices,<br>etc. ....        | \$ 14,517,892         | 23,317                | 4,655,907         | 5,643,039         | 471,808          | 1,113,152         | 1,687,124         | 918,545             |
| Revenue equipment—trucks—trailers, etc. ...                | \$ 98,057,859         | 249,116               | 21,777,439        | 54,159,758        | 3,232,780        | 1,005,277         | 9,665,084         | 7,268,375           |
| Service cars—shop and garage equipment ...                 | \$ 3,185,233          | —                     | 739,027           | 1,990,799         | 52,194           | 80,370            | 117,433           | 174,911             |
| Furniture and office equipment .....                       | \$ 2,198,447          | 6,470                 | 409,045           | 1,134,977         | 211,853          | 6,313             | 194,678           | 235,111             |
| Organization expenses, etc. ....                           | \$ 1,779,299          | —                     | 184,271           | 911,129           | 15,548           | 30,759            | 582,956           | 54,636              |
| <b>Total cost .....</b>                                    | <b>\$ 122,531,230</b> | <b>288,790</b>        | <b>28,619,557</b> | <b>65,091,744</b> | <b>4,071,773</b> | <b>2,473,035</b>  | <b>12,386,981</b> | <b>9,599,350</b>    |
| Depreciation reserve accrued to December<br>31, 1957 ..... | \$ 59,903,908         | 103,078               | 14,401,137        | 33,971,158        | 1,118,649        | 1,132,345         | 4,746,770         | 4,425,771           |
| Value at December 31, 1957 .....                           | \$ 62,627,322         | 180,712               | 14,218,420        | 31,120,586        | 2,953,124        | 1,340,690         | 7,640,211         | 5,173,579           |
| <b>Operating revenues:</b>                                 |                       |                       |                   |                   |                  |                   |                   |                     |
| Freight revenue:   |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 172,304,946        | 1,275,711             | 33,411,554        | 93,311,220        | 6,600,635        | 5,955,936         | 16,926,600        | 14,822,290          |
| City .....   | \$ 2,090,158          | —                     | 1,134,866         | 607,436           | —                | —                 | 210,225           | 137,631             |
| Passenger revenue—regular routes:                          |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 68,017             | —                     | —                 | 68,017            | —                | —                 | —                 | —                   |
| City .....   | \$ 51,425             | —                     | —                 | 51,425            | —                | —                 | —                 | —                   |
| Special bus revenue—chartered service:                     |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 15,105             | —                     | —                 | 15,105            | —                | —                 | —                 | —                   |
| City .....   | \$ —                  | —                     | —                 | —                 | —                | —                 | —                 | —                   |
| Mail—baggage—express—newspaper:                            |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 196,423            | —                     | 11,485            | 4,480             | —                | 60,010            | 120,448           | —                   |
| City .....   | \$ 876                | —                     | —                 | 876               | —                | —                 | —                 | —                   |
| Other motor carrier revenue:                               |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 1,665,472          | —                     | 574,182           | 296,918           | 62,321           | 25,492            | 326,459           | 380,100             |
| City .....   | \$ 25,395             | —                     | 25,395            | —                 | —                | —                 | —                 | —                   |
| <b>Total revenue:</b>                                      |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | \$ 174,249,963        | 1,276,711             | 33,997,221        | 93,695,740        | 6,662,956        | 6,041,438         | 17,373,507        | 15,202,390          |
| City .....   | \$ 2,167,854          | —                     | 1,160,261         | 659,737           | —                | —                 | 210,225           | 137,631             |
| <b>Total operating revenues .....</b>                      | <b>\$ 176,417,817</b> | <b>1,276,711</b>      | <b>35,157,482</b> | <b>94,355,477</b> | <b>6,662,956</b> | <b>6,041,438</b>  | <b>17,583,732</b> | <b>15,340,021</b>   |
| <b>Operating expenses:</b>                                 |                       |                       |                   |                   |                  |                   |                   |                     |
| Repairs to revenue and service equipment ..                | \$ 20,613,420         | 72,626                | 4,673,923         | 9,730,755         | 561,071          | 334,104           | 1,894,218         | 3,346,723           |
| Tires and tubes .....                                      | \$ 4,522,135          | 8,500                 | 1,059,960         | 2,205,045         | 199,156          | 106,378           | 455,022           | 488,074             |
| Other maintenance and garage expenses .....                | \$ 5,020,341          | 10,848                | 1,271,638         | 2,406,087         | 93,032           | 360,155           | 768,780           | 109,601             |
| Wages and bonuses of drivers and helpers ...               | \$ 39,963,969         | 160,553               | 7,040,715         | 24,389,673        | 1,514,002        | 1,052,372         | 2,579,051         | 3,218,603           |
| Fuel and oil for motor vehicles (excl. fuel<br>tax) .....  | \$ 12,631,931         | 50,163                | 2,521,899         | 7,436,162         | 435,956          | 308,008           | 1,100,103         | 779,640             |
| Bridge, tunnel and ferry tolls .....                       | \$ 1,216,668          | 9,350                 | 354,638           | 483,542           | 14,345           | —                 | 87,648            | 267,145             |
| Other transportation expenses .....                        | \$ 9,760,232          | 27,029                | 965,175           | 3,537,008         | 990,136          | 987,685           | 3,122,155         | 131,044             |
| Station and terminal expenses .....                        | \$ 10,945,692         | 13,450                | 2,705,255         | 7,234,249         | 282,770          | 113,347           | 593,621           | —                   |
| Traffic solicitation and advertising ex-<br>penses .....   | \$ 2,227,244          | 14,206                | 782,841           | 940,237           | 71,641           | 172,172           | 246,147           | —                   |
| Insurance and safety expenses—claims, etc                  | \$ 7,799,585          | 20,136                | 1,815,643         | 4,340,966         | 255,410          | 115,885           | 740,197           | 511,348             |
| Administration and general expenses .....                  | \$ 17,815,081         | 205,533               | 3,093,512         | 9,637,510         | 546,035          | 828,439           | 1,818,330         | 1,685,722           |
| Depreciation .....   | \$ 12,949,863         | 44,734                | 3,239,633         | 6,698,324         | 434,709          | 141,854           | 1,497,207         | 893,402             |
| Operating taxes and licences (incl. fuel tax)              | \$ 11,641,481         | 43,627                | 2,374,226         | 6,997,756         | 302,155          | 322,392           | 873,990           | 727,335             |
| Rents .....  | \$ 3,652,084          | 1,622                 | 334,231           | 1,891,561         | 69,610           | 59,923            | 300,340           | 994,797             |
| Other operating expenses .....                             | \$ 7,687,553          | 563,696               | 191,658           | 1,921,610         | 254,033          | 990,580           | 1,242,888         | 2,523,193           |
| <b>Total operating expenses .....</b>                      | <b>\$ 168,447,384</b> | <b>1,249,073</b>      | <b>32,433,947</b> | <b>89,850,485</b> | <b>6,024,061</b> | <b>5,893,294</b>  | <b>17,319,697</b> | <b>15,676,827</b>   |
| <b>Income account:</b>                                     |                       |                       |                   |                   |                  |                   |                   |                     |
| Net operating revenue .....                                | \$ 7,970,433          | 27,638                | 2,723,535         | 4,504,992         | 638,895          | 148,144           | 264,035           | Dr. 336,806         |
| Income from other sources .....                            | \$ 1,947,538          | —                     | 219,152           | 518,778           | 56,812           | 508,041           | 201,672           | 443,083             |
| Gross income .....   | \$ 9,917,971          | 27,638                | 2,942,687         | 5,023,770         | 695,707          | 656,185           | 465,707           | 106,277             |
| Interest and other deductions .....                        | \$ 1,695,042          | 20,525                | 228,272           | 870,120           | 40,903           | —                 | 328,334           | 206,887             |
| <b>Net income before income taxes .....</b>                | <b>\$ 8,222,929</b>   | <b>7,112</b>          | <b>2,714,415</b>  | <b>4,153,650</b>  | <b>654,804</b>   | <b>656,185</b>    | <b>137,373</b>    | <b>Dr. 100,610</b>  |
| Income tax .....   | \$ 3,530,728          | —                     | 814,183           | 2,241,036         | 73,282           | 195,771           | 250,001           | Cr. 43,575          |
| Net income transferred to earned surplus ..                | \$ 4,692,201          | 7,112                 | 1,900,232         | 1,912,584         | 581,522          | 460,414           | Dr. 112,626       | Dr. 57,035          |
| <b>Traffic statistics:</b>                                 |                       |                       |                   |                   |                  |                   |                   |                     |
| Freight carried .....                                      | ton 12,385,781        | 18,730                | 2,528,533         | 6,484,379         | 184,026          | 498,104           | 1,003,139         | 1,668,870           |
| Fuel consumed:   |                       |                       |                   |                   |                  |                   |                   |                     |
| Gasoline .....   | gal. 40,993,214       | 196,982               | 7,958,390         | 26,141,078        | 1,249,749        | 1,291,657         | 1,944,387         | 2,210,971           |
| Diesel oil .....   | " 9,521,969           | —                     | 2,538,589         | 2,711,007         | 379,812          | 150,000           | 2,512,476         | 1,229,985           |
| Liquefied petroleum gases .....                            | " 102,978             | —                     | —                 | —                 | —                | 30,000            | 72,978            | —                   |
| Passengers carried—regular routes:                         |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | No. 380,333           | —                     | —                 | 380,333           | —                | —                 | —                 | —                   |
| City .....   | " 469,272             | —                     | —                 | 469,272           | —                | —                 | —                 | —                   |
| Passengers carried—chartered service:                      |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | " —                   | —                     | —                 | —                 | —                | —                 | —                 | —                   |
| City .....   | " —                   | —                     | —                 | —                 | —                | —                 | —                 | —                   |
| Miles run by buses—regular routes:                         |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | " 218,454             | —                     | —                 | 218,454           | —                | —                 | —                 | —                   |
| City .....   | " 137,500             | —                     | —                 | 137,500           | —                | —                 | —                 | —                   |
| Miles run by buses—chartered service:                      |                       |                       |                   |                   |                  |                   |                   |                     |
| Inter-city and rural .....                                 | " —                   | —                     | —                 | —                 | —                | —                 | —                 | —                   |
| City .....   | " —                   | —                     | —                 | —                 | —                | —                 | —                 | —                   |

SOURCE: D.B.S. 53-205- Annual  
MOTOR CARRIERS-FREIGHT (1957)





MOTOR CARRIERS - FREIGHT

TABLE 8. Revenue Equipment Available at December 31, 1957 - Concluded

|   | Canada  | Atlantic<br>Provinces | Quebec | Ontario | Manitoba | Saskat-<br>chewan | Alberta | British<br>Columbia |
|---|---------|-----------------------|--------|---------|----------|-------------------|---------|---------------------|
| Group III Carriers - (\$20,000 to \$99,999)         |         |                       |        |         |          |                   |         |                     |
| Trucks - capacity:                                  |         |                       |        |         |          |                   |         |                     |
| 2 tons and under                                    | No. 470 | 25                    | 118    | 78      | 46       | 50                | 10      | 143                 |
| 2½ - 4 tons   | 630     | 52                    | 214    | 113     | 56       | 49                | 32      | 114                 |
| 4½ - 6 "  | 340     | 5                     | 54     | 112     | 24       | 22                | 19      | 104                 |
| 6½ - 8 "  | 253     | 19                    | 16     | 46      | 5        | 40                | 10      | 117                 |
| 8½ - 10 "   | 41      | 4                     | 3      | 10      | -        | 3                 | 2       | 19                  |
| 10½ - 12 "  | 22      | 2                     | 3      | -       | -        | 6                 | -       | 11                  |
| Over 12 "   | 30      | 1                     | -      | 7       | 1        | 1                 | -       | 20                  |
| Total number of trucks                              | 1,786   | 108                   | 408    | 366     | 132      | 171               | 73      | 528                 |
| Road tractors                                       | 678     | 21                    | 53     | 248     | 59       | 151               | 81      | 65                  |
| Semi-trailers - capacity:                           |         |                       |        |         |          |                   |         |                     |
| 2 tons and under                                    | -       | -                     | -      | -       | -        | -                 | -       | -                   |
| 2½ - 4 tons   | 32      | 7                     | 10     | 8       | -        | 6                 | -       | 1                   |
| 4½ - 6 "  | 54      | 1                     | 12     | 14      | 1        | 18                | 1       | 7                   |
| 6½ - 8 "  | 38      | -                     | 2      | 11      | 11       | 9                 | -       | 5                   |
| 8½ - 10 "   | 132     | 2                     | 11     | 60      | 4        | 40                | 7       | 8                   |
| 10½ - 12 "  | 167     | 11                    | 1      | 28      | 29       | 63                | 19      | 16                  |
| Over 12 "   | 291     | 2                     | 19     | 138     | 17       | 30                | 52      | 33                  |
| Total number of semi-trailers                       | 714     | 23                    | 55     | 259     | 62       | 166               | 79      | 70                  |
| Trailers - capacity:                                |         |                       |        |         |          |                   |         |                     |
| 2 tons and under                                    | 4       | -                     | -      | -       | -        | -                 | 1       | 3                   |
| 2½ - 4 tons   | 4       | -                     | -      | 3       | -        | -                 | -       | 1                   |
| 4½ - 6 "  | 4       | -                     | -      | -       | 3        | 1                 | -       | -                   |
| 6½ - 8 "  | 1       | -                     | -      | 1       | -        | -                 | -       | -                   |
| 8½ - 10 "   | 8       | -                     | -      | 5       | -        | 2                 | -       | 1                   |
| 10½ - 12 "  | 6       | -                     | 1      | 3       | 2        | -                 | -       | -                   |
| Over 12 "   | 13      | -                     | 4      | 1       | 1        | 1                 | 6       | -                   |
| Total number of trailers                            | 40      | -                     | 5      | 13      | 6        | 4                 | 7       | 5                   |
| Buses - capacity:                                   |         |                       |        |         |          |                   |         |                     |
| 7 seats and under                                   | 3       | -                     | -      | -       | -        | -                 | -       | 3                   |
| 8-19 seats  | 5       | -                     | -      | -       | 2        | 3                 | -       | -                   |
| 20-21 "   | -       | -                     | -      | -       | -        | -                 | -       | -                   |
| 22-25 "   | -       | -                     | -      | -       | -        | -                 | -       | -                   |
| 26-29 "   | 3       | -                     | -      | -       | 1        | -                 | -       | 2                   |
| 30 seats and over                                   | 1       | -                     | -      | -       | -        | -                 | -       | 1                   |
| Total number of buses                               | 12      | -                     | -      | -       | 3        | 3                 | -       | 6                   |
| Vehicles equipped with diesel engines:              |         |                       |        |         |          |                   |         |                     |
| Trucks  | 4       | -                     | 2      | -       | -        | -                 | 2       | -                   |
| Road tractors                                       | 59      | -                     | 7      | 11      | 13       | 1                 | 10      | 17                  |
| Buses   | -       | -                     | -      | -       | -        | -                 | -       | -                   |
| Vehicles equipped with liquefied petroleum engines: |         |                       |        |         |          |                   |         |                     |
| Road tractors                                       | 2       | -                     | -      | -       | -        | -                 | 2       | -                   |

TABLE 9. Accidents - Groups I, II, and III Carriers only, 1957

|  | Canada     |         | Atlantic<br>Provinces |         | Quebec  |         | Ontario |         | Manitoba |         | Saskat-<br>chewan |         | Alberta |         | British<br>Columbia |         |
|--|------------|---------|-----------------------|---------|---------|---------|---------|---------|----------|---------|-------------------|---------|---------|---------|---------------------|---------|
|  | Killed     | Injured | Killed                | Injured | Killed  | Injured | Killed  | Injured | Killed   | Injured | Killed            | Injured | Killed  | Injured | Killed              | Injured |
| Drivers and helpers  | No. 11     | 170     | -                     | 9       | 3       | 34      | 7       | 89      | -        | -       | -                 | 3       | -       | 1       | 1                   | 34      |
| Other employees  | -          | 17      | -                     | 1       | -       | 4       | -       | -       | -        | -       | -                 | 1       | -       | -       | -                   | 11      |
| Passengers   | 2          | 27      | -                     | -       | -       | -       | 2       | 10      | -        | -       | -                 | 12      | -       | -       | -                   | 5       |
| Pedestrians  | 11         | 32      | -                     | -       | 2       | 4       | 8       | 22      | -        | -       | -                 | -       | -       | -       | 1                   | 6       |
| Other persons  | 52         | 192     | 1                     | 2       | 10      | 34      | 30      | 117     | 8        | 17      | -                 | 10      | 2       | 3       | 1                   | 9       |
| Total  | 76         | 438     | 1                     | 12      | 15      | 76      | 47      | 238     | 8        | 17      | -                 | 26      | 2       | 4       | 3                   | 65      |
| No. of accidents resulting<br>in property damage only<br>(over \$100.) | 2,140      |         | 40                    |         | 647     |         | 1,149   |         | 28       |         | 34                |         | 15      |         | 227                 |         |
| Total property damage<br>resulting from M.V. accidents                 | \$ 980,193 |         | 18,849                |         | 259,737 |         | 411,952 |         | 34,205   |         | 67,954            |         | 25,565  |         | 161,931             |         |

SOURCE: D.B.S. 53-205- Annual  
MOTOR CARRIERS-FREIGHT (1957)

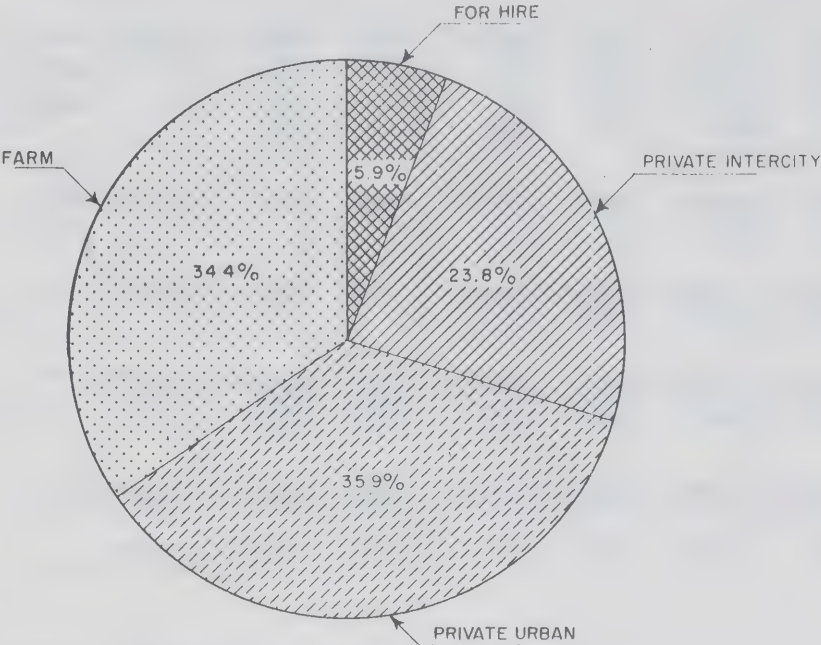


DOMINION BUREAU OF STATISTICS

MOTOR TRANSPORT TRAFFIC  
NATIONAL ESTIMATES  
1958

CHART - 1

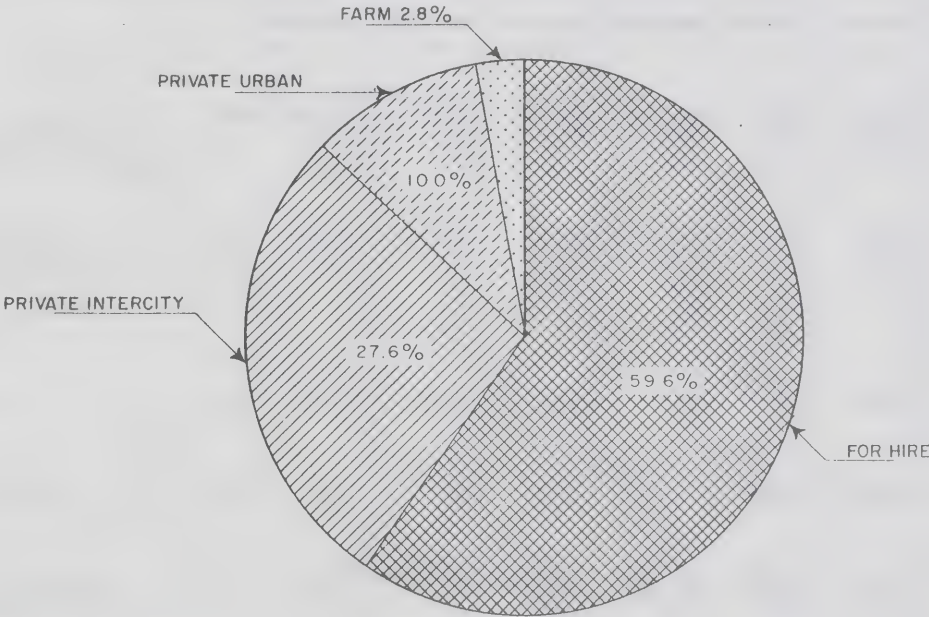
TRUCK REGISTRATIONS BY TYPE OF OPERATION



Source: Appendix I.

CHART - 2

NET TON MILES BY TYPE OF OPERATION



Source: Section I, Table I.

SOURCE: D.B.S. 53-207- Annual  
MOTOR TRANSPORT TRAFFIC - National Estimates (1958)





MOTOR TRANSPORT TRAFFIC, NATIONAL ESTIMATES, 1958

TABLE 2. All Trucks by Gross Vehicle Weight Group  
A. 1958

|  | 0-2½ tons   | 2½-5 tons   | 5-7½ tons   | 7½-10 tons  | 10-15 tons  | 15-25 tons  | Over 25 tons | Total        |
|--|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| <b>Mileage:</b>                                  |             |             |             |             |             |             |              |              |
| Total mileage travelled.....'000                 | 2, 078, 032 | 1, 736, 419 | 351, 957    | 525, 741    | 667, 992    | 649, 308    | 606, 563     | 6, 616, 012  |
| Average yearly mileage per truck.....            | 6, 000      | 6, 000      | 5, 900      | 7, 100      | 12, 300     | 24, 000     | 50, 200      | 7, 700       |
| Average distance each ton was carried.....       | 20.1        | 16.8        | 13.7        | 15.7        | 16.4        | 37.3        | 126.1        | 34.0         |
| Percentage of total mileage travelled empty..... | 68.2        | 54.9        | 37.3        | 37.9        | 40.6        | 32.5        | 22.1         | 50.1         |
| <b>Fuel:</b>                                     |             |             |             |             |             |             |              |              |
| Total gallons of gasoline consumed.....'000      | 138, 635    | 143, 929    | 37, 282     | 65, 193     | 92, 793     | 97, 775     | 73, 926      | 649, 533     |
| Miles per gallon of gasoline.....                | 15.0        | 12.1        | 9.4         | 8.1         | 7.1         | 5.8         | 5.2          | 9.7          |
| Total gallons of diesel oil consumed.....'000    | —           | —           | —           | —           | 1, 351      | 13, 818     | 34, 926      | 50, 095      |
| Miles per gallon of diesel oil.....              | —           | —           | —           | —           | 7.6         | 6.1         | 6.3          | 6.3          |
| Total gallons of other fuel consumed.....'000    | —           | 21          | —           | 91          | 373         | 125         | 33           | 643          |
| Miles per gallon of other fuel.....              | —           | 8.2         | —           | 9.2         | 6.9         | 5.9         | 5.0          | 7.0          |
| <b>Weight of goods carried:</b>                  |             |             |             |             |             |             |              |              |
| Total tons of goods carried.....'000             | 11, 089     | 31, 128     | 31, 615     | 70, 563     | 141, 096    | 123, 953    | 50, 869      | 460, 313     |
| Average weight carried <sup>1</sup> .....ton     | 0.3         | 0.7         | 2.0         | 3.4         | 5.9         | 10.5        | 13.6         | 4.7          |
| <b>Net ton miles:</b>                            |             |             |             |             |             |             |              |              |
| Total net ton miles performed.....'000           | 222, 885    | 524, 286    | 433, 681    | 1, 108, 795 | 2, 320, 471 | 4, 622, 112 | 6, 413, 053  | 15, 645, 283 |
| Average net ton miles per truck.....             | 600         | 1, 800      | 7, 300      | 14, 900     | 42, 900     | 170, 900    | 530, 900     | 18, 100      |
| <b>Capacity ton miles:</b>                       |             |             |             |             |             |             |              |              |
| Total capacity ton miles <sup>2</sup> .....'000  | 1, 683, 587 | 2, 366, 214 | 1, 201, 814 | 2, 840, 599 | 5, 334, 689 | 9, 461, 200 | 11, 897, 551 | 34, 785, 654 |
| Average capacity ton miles per truck.....        | 4, 900      | 8, 200      | 20, 100     | 38, 100     | 98, 500     | 349, 700    | 985, 000     | 40, 300      |
| Percentage of capacity utilized.....             | 13.2        | 22.2        | 36.1        | 39.0        | 43.5        | 48.9        | 53.9         | 45.0         |
| <b>Gross ton miles:</b>                          |             |             |             |             |             |             |              |              |
| Total gross ton miles <sup>3</sup> .....'000     | 3, 525, 932 | 4, 235, 336 | 1, 616, 773 | 3, 218, 291 | 5, 505, 446 | 9, 499, 522 | 12, 316, 759 | 39, 918, 059 |
| Average gross ton miles per truck.....           | 10, 200     | 14, 700     | 27, 100     | 43, 200     | 101, 700    | 351, 100    | 1, 019, 700  | 46, 300      |
| Average annual population.....                   | 346, 434    | 288, 774    | 59, 760     | 74, 524     | 54, 151     | 27, 053     | 12, 079      | 862, 775     |

TABLE 2. All Trucks by Gross Vehicle Weight Group  
B. 1957 (Revised)

|  | 0-2½ tons   | 2½-5 tons   | 5-7½ tons   | 7½-10 tons  | 10-15 tons  | 15-25 tons  | Over 25 tons | Total        |
|--|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| <b>Mileage:</b>                                  |             |             |             |             |             |             |              |              |
| Total mileage travelled.....'000                 | 1, 921, 477 | 1, 591, 135 | 325, 523    | 480, 189    | 618, 557    | 604, 980    | 371, 353     | 5, 913, 214  |
| Average yearly mileage per truck.....            | 5, 800      | 5, 700      | 5, 700      | 6, 500      | 11, 900     | 23, 000     | 46, 400      | 7, 100       |
| Average distance each ton was carried.....       | 17.1        | 12.0        | 13.5        | 14.4        | 13.8        | 33.8        | 126.3        | 26.6         |
| Percentage of total mileage travelled empty..... | 66.6        | 51.7        | 36.5        | 38.0        | 41.2        | 33.5        | 24.5         | 49.9         |
| <b>Fuel:</b>                                     |             |             |             |             |             |             |              |              |
| Total gallons of gasoline consumed.....'000      | 125, 977    | 121, 989    | 33, 140     | 58, 125     | 86, 252     | 92, 627     | 46, 437      | 564, 547     |
| Miles per gallon of gasoline.....                | 15.3        | 13.0        | 9.8         | 8.2         | 7.0         | 5.6         | 5.2          | 10.1         |
| Total gallons of diesel oil consumed.....'000    | —           | —           | 85          | 132         | 1, 159      | 13, 775     | 21, 799      | 36, 950      |
| Miles per gallon of diesel oil.....              | —           | —           | 9.2         | 9.0         | 6.3         | 6.2         | 5.9          | 6.0          |
| Total gallons of other fuel consumed.....'000    | 18          | 81          | 6           | 120         | 638         | 54          | 486          | 1, 403       |
| Miles per gallon of other fuel.....              | 15.8        | 11.1        | 6.9         | 10.2        | 6.3         | 4.5         | 4.3          | 6.3          |
| <b>Weight of goods carried:</b>                  |             |             |             |             |             |             |              |              |
| Total tons of goods carried.....'000             | 11, 594     | 39, 767     | 30, 999     | 69, 399     | 148, 659    | 120, 997    | 29, 855      | 451, 270     |
| Average weight carried <sup>1</sup> .....ton     | 0.3         | 0.6         | 2.0         | 3.4         | 5.6         | 10.2        | 13.4         | 4.1          |
| <b>Net ton miles:</b>                            |             |             |             |             |             |             |              |              |
| Total net ton miles performed.....'000           | 197, 938    | 478, 296    | 419, 646    | 998, 975    | 2, 053, 558 | 4, 088, 086 | 3, 770, 631  | 12, 007, 130 |
| Average net ton miles per truck.....             | 600         | 1, 700      | 7, 300      | 13, 600     | 39, 600     | 155, 300    | 471, 300     | 14, 400      |
| <b>Capacity ton miles:</b>                       |             |             |             |             |             |             |              |              |
| Total capacity ton miles <sup>2</sup> .....'000  | 1, 570, 913 | 2, 183, 461 | 1, 129, 010 | 2, 628, 102 | 4, 934, 333 | 8, 549, 732 | 7, 604, 598  | 28, 600, 149 |
| Average capacity ton miles per truck.....        | 4, 700      | 7, 800      | 19, 800     | 35, 800     | 95, 200     | 324, 700    | 950, 600     | 34, 400      |
| Percentage of capacity utilized.....             | 12.6        | 21.9        | 37.2        | 38.0        | 41.6        | 47.8        | 49.6         | 42.0         |
| <b>Gross ton miles:</b>                          |             |             |             |             |             |             |              |              |
| Total gross ton miles <sup>3</sup> .....'000     | 3, 233, 971 | 3, 838, 116 | 1, 519, 684 | 2, 926, 667 | 4, 974, 203 | 8, 317, 527 | 7, 361, 346  | 32, 171, 514 |
| Average gross ton miles per truck.....           | 9, 700      | 13, 600     | 26, 600     | 39, 900     | 95, 900     | 315, 900    | 920, 200     | 38, 700      |
| Average annual population.....                   | 333, 780    | 281, 557    | 57, 133     | 73, 400     | 51, 853     | 26, 332     | 8, 000       | 832, 055     |

See footnotes page 18.

SOURCE: D.B.S. 53-207- Annual  
MOTOR TRANSPORT TRAFFIC - National Estimates (1958)







DOMINION BUREAU OF STATISTICS

TABLE 9. Farm Trucks by Province

|   | New-found-land | Prince Edward Island | Nova Scotia | New Brunswick | Quebec  | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Canada    |
|---|----------------|----------------------|-------------|---------------|---------|---------|----------|--------------|---------|------------------|-----------|
| <b>Mileage:</b>                                   |                |                      |             |               |         |         |          |              |         |                  |           |
| Total mileage travelled .....                     | '000 3,260     | 12,068               | 26,626      | 21,878        | 136,383 | 231,094 | 79,891   | 217,564      | 234,314 | 57,256           | 1,020,334 |
| Average yearly mileage per truck .....            | 4,500          | 4,600                | 5,200       | 4,600         | 3,800   | 3,700   | 2,700    | 2,800        | 3,600   | 4,900            | 3,400     |
| Average distance each ton was carried .....       | 11.0           | 14.5                 | 11.3        | 16.1          | 19.3    | 17.4    | 14.7     | 12.5         | 16.1    | 18.1             | 15.1      |
| Percentage of total mileage travelled empty ..... | 70.2           | 76.4                 | 71.5        | 66.3          | 72.0    | 66.5    | 74.4     | 70.4         | 69.4    | 74.3             | 70.0      |
| <b>Fuel:</b>                                      |                |                      |             |               |         |         |          |              |         |                  |           |
| Total gallons of gasoline consumed....            | '000 240       | 914                  | 2,242       | 1,852         | 10,143  | 16,275  | 6,882    | 18,675       | 18,898  | 4,344            | 80,465    |
| Miles per gallon of gasoline .....                | 13.6           | 13.2                 | 11.9        | 11.8          | 13.4    | 14.2    | 11.6     | 11.7         | 12.4    | 13.2             | 12.7      |
| Total gallons of diesel oil consumed .....        | —              | —                    | —           | —             | —       | —       | —        | —            | —       | —                | —         |
| Miles per gallon of diesel oil .....              | —              | —                    | —           | —             | —       | —       | —        | —            | —       | —                | —         |
| Total gallons of other fuel consumed .....        | —              | —                    | —           | —             | —       | —       | —        | —            | —       | —                | —         |
| Miles per gallon of other fuel .....              | —              | —                    | —           | —             | —       | —       | —        | —            | —       | —                | —         |
| <b>Weight of goods carried:</b>                   |                |                      |             |               |         |         |          |              |         |                  |           |
| Total tons of goods carried .....                 | '000 54        | 248                  | 875         | 607           | 2,102   | 4,540   | 2,586    | 10,355       | 6,999   | 1,050            | 29,416    |
| Average weight carried <sup>1</sup> .....         | ton 0.6        | 1.3                  | 1.3         | 1.3           | 1.1     | 1.0     | 1.9      | 2.0          | 1.6     | 1.3              | 1.5       |
| <b>Net ton miles:</b>                             |                |                      |             |               |         |         |          |              |         |                  |           |
| Total net ton miles performed .....               | '000 592       | 3,588                | 9,919       | 9,769         | 40,650  | 79,053  | 37,990   | 129,934      | 112,797 | 19,005           | 443,297   |
| Average net ton miles per truck .....             | 800            | 1,400                | 1,900       | 2,000         | 1,100   | 1,300   | 1,300    | 1,600        | 1,700   | 1,600            | 1,500     |
| <b>Capacity ton miles:</b>                        |                |                      |             |               |         |         |          |              |         |                  |           |
| Total capacity ton miles <sup>2</sup> .....       | '000 3,633     | 15,191               | 40,323      | 44,941        | 180,596 | 318,011 | 158,485  | 549,212      | 448,054 | 79,626           | 1,838,072 |
| Average capacity ton miles per truck .....        | 5,100          | 5,800                | 7,800       | 9,400         | 5,100   | 5,100   | 5,300    | 6,900        | 6,900   | 6,800            | 6,200     |
| Percentage of capacity utilized .....             | 16.3           | 23.6                 | 24.6        | 21.7          | 22.5    | 24.9    | 24.0     | 23.7         | 25.2    | 23.9             | 24.1      |
| <b>Gross ton miles:</b>                           |                |                      |             |               |         |         |          |              |         |                  |           |
| Total gross ton miles <sup>3</sup> .....          | '000 6,650     | 24,042               | 64,018      | 63,198        | 297,954 | 534,569 | 224,013  | 728,814      | 620,695 | 124,923          | 2,688,876 |
| Average gross ton miles per truck .....           | 9,300          | 9,200                | 12,400      | 13,200        | 8,400   | 8,500   | 7,500    | 9,200        | 9,500   | 10,600           | 9,100     |
| Average annual population .....                   | 717            | 2,609                | 5,154       | 4,790         | 35,501  | 62,646  | 29,783   | 79,065       | 65,016  | 11,740           | 297,021   |

<sup>1</sup> Ton miles divided by miles travelled with load.  
<sup>2</sup> Capacity ton miles are determined by multiplying the actual number of miles travelled by the estimated capacity or the weight of the heaviest load carried, whichever is larger.  
<sup>3</sup> Gross ton miles performed are determined by adding to the total ton miles performed the weight of the vehicle empty (tare) multiplied by total miles travelled.

SECTION II- INTRAPROVINCIAL TRAFFIC BY FOR HIRE AND PRIVATE INTERCITY TRUCKS IN CANADA, 1958.

TABLE 10. Selected Statistics of Intercity Traffic by Gross Vehicle Weight Group

| Gross vehicle weight       | For hire                |                                 |                     |                        |                          |                |                      |
|----------------------------|-------------------------|---------------------------------|---------------------|------------------------|--------------------------|----------------|----------------------|
|                            | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton | Total revenue  | Revenue per ton mile |
|                            | '000 tons               | '000                            | '000                | tons                   | miles                    | \$'000         | ¢                    |
| 20,000 lb. and under ..... | 8,909                   | 73,640                          | 220,964             | 3.0                    | 24.8                     | 31,704         | 14.3                 |
| 20,001-30,000 lb. ....     | 36,792                  | 114,358                         | 709,168             | 6.2                    | 19.3                     | 61,552         | 8.7                  |
| 30,001-50,000 lb. ....     | 20,478                  | 124,922                         | 1,294,554           | 10.4                   | 63.2                     | 94,500         | 7.3                  |
| 50,001 lb. and over .....  | 23,030                  | 179,394                         | 2,297,245           | 12.8                   | 99.8                     | 150,299        | 6.5                  |
| <b>Total .....</b>         | <b>89,209</b>           | <b>492,314</b>                  | <b>4,521,931</b>    | <b>9.2</b>             | <b>59.7</b>              | <b>338,055</b> | <b>7.5</b>           |
|                            | Private intercity       |                                 |                     |                        |                          |                |                      |
|                            | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton |                |                      |
|                            | '000 tons               | '000                            | '000                | tons                   | miles                    |                |                      |
| 10,000 lb. and under ..... | 7,650                   | 378,341                         | 224,809             | 0.6                    | 29.4                     |                |                      |
| 10,001-20,000 lb. ....     | 27,418                  | 166,419                         | 529,937             | 3.2                    | 19.3                     |                |                      |
| 20,001-30,000 lb. ....     | 36,089                  | 130,310                         | 752,930             | 5.8                    | 20.9                     |                |                      |
| 30,001-50,000 lb. ....     | 31,671                  | 89,653                          | 935,316             | 10.4                   | 29.5                     |                |                      |
| 50,001 lb. and over .....  | 15,293                  | 60,887                          | 880,328             | 14.5                   | 57.6                     |                |                      |
| <b>Total .....</b>         | <b>118,121</b>          | <b>825,610</b>                  | <b>3,323,320</b>    | <b>4.0</b>             | <b>28.1</b>              |                |                      |

SOURCE: D.B.S. 53-207- Annual,  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)

MOTOR TRANSPORT TRAFFIC, NATIONAL ESTIMATES, 1958

TABLE 11. Selected Statistics of Intercity Traffic by Commodity Group

| Commodity group                     | For hire                |                                 |                     |                        |                          |               |                      |
|-------------------------------------|-------------------------|---------------------------------|---------------------|------------------------|--------------------------|---------------|----------------------|
|                                     | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton | Total revenue | Revenue per ton mile |
|                                     | '000 tons               | '000                            | '000                | tons                   | miles                    | \$'000        | ¢                    |
| Agricultural products .....         | 2,731                   | 18,258                          | 188,919             | 10.3                   | 69.2                     | 12,107        | 6.4                  |
| Animals and animal products.....    | 4,824                   | 62,861                          | 322,547             | 5.1                    | 66.9                     | 29,505        | 9.1                  |
| Mine products.....                  | 42,010                  | 57,118                          | 571,238             | 10.0                   | 13.6                     | 37,928        | 6.6                  |
| Forest products .....               | 3,542                   | 16,559                          | 179,560             | 10.8                   | 50.7                     | 12,849        | 7.2                  |
| Manufactures and miscellaneous..... | 23,214                  | 208,293                         | 2,209,111           | 10.6                   | 95.2                     | 148,770       | 6.7                  |
| N.O.S. general freight.....         | 12,888                  | 129,225                         | 1,050,556           | 8.1                    | 81.5                     | 96,896        | 9.2                  |
| Total .....                         | 89,209                  | 492,314                         | 4,521,931           | 9.2                    | 50.7                     | 338,055       | 7.5                  |
|                                     | Private intercity       |                                 |                     |                        |                          |               |                      |
|                                     | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton |               |                      |
|                                     | '000 tons               | '000                            | '000                | tons                   | miles                    |               |                      |
| Agricultural products .....         | 4,793                   | 41,721                          | 218,583             | 5.2                    |                          |               | 45.6                 |
| Animals and animal products.....    | 4,074                   | 90,379                          | 237,717             | 2.6                    |                          |               | 58.3                 |
| Mine products.....                  | 53,498                  | 65,739                          | 550,636             | 8.4                    |                          |               | 10.3                 |
| Forest products.....                | 13,781                  | 57,133                          | 438,721             | 7.7                    |                          |               | 31.8                 |
| Manufactures and miscellaneous..... | 35,434                  | 492,813                         | 1,687,774           | 3.4                    |                          |               | 47.6                 |
| N.O.S. general freight.....         | 6,541                   | 77,825                          | 189,889             | 2.4                    |                          |               | 29.0                 |
| Total .....                         | 118,121                 | 825,610                         | 3,323,320           | 4.0                    |                          |               | 28.1                 |

SECTION III. INTERPROVINCIAL AND INTERNATIONAL TRAFFIC BY CANADIAN REGISTERED TRUCKS, 1958

TABLE 12. Goods Carried by Province of Origin and Destination

| To:                                   | For hire           |        |         |          |              |         |                  |                                 |               |       |
|---------------------------------------|--------------------|--------|---------|----------|--------------|---------|------------------|---------------------------------|---------------|-------|
|                                       | Atlantic provinces | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Yukon and Northwest Territories | United States | Total |
| '000 tons                             |                    |        |         |          |              |         |                  |                                 |               |       |
| From:                                 |                    |        |         |          |              |         |                  |                                 |               |       |
| Atlantic provinces.....               | —                  | 19     | 3       | —        | —            | —       | —                | —                               | 9             | 31    |
| Quebec .....                          | 26                 | —      | 1,094   | 2        | —            | 37      | 2                | —                               | 131           | 1,292 |
| Ontario .....                         | 4                  | 1,022  | —       | 101      | 7            | 90      | 1                | —                               | 149           | 1,374 |
| Manitoba.....                         | —                  | 2      | 92      | —        | 118          | 25      | 3                | —                               | 12            | 252   |
| Saskatchewan.....                     | —                  | —      | 7       | 97       | —            | 43      | —                | —                               | 7             | 154   |
| Alberta .....                         | —                  | 33     | 89      | 35       | 29           | —       | 119              | 2                               | 11            | 318   |
| British Columbia .....                | —                  | —      | 3       | 3        | 1            | 111     | —                | 2                               | 101           | 221   |
| Yukon and Northwest Territories ..... | —                  | —      | —       | —        | —            | 12      | —                | —                               | —             | 12    |
| United States .....                   | 5                  | 148    | 213     | 21       | 3            | 5       | 77               | —                               | —             | 472   |
| Total .....                           | 35                 | 1,224  | 1,501   | 259      | 158          | 323     | 202              | 4                               | 420           | 4,126 |
| Private intercity                     |                    |        |         |          |              |         |                  |                                 |               |       |
| '000 tons                             |                    |        |         |          |              |         |                  |                                 |               |       |
| From:                                 |                    |        |         |          |              |         |                  |                                 |               |       |
| Atlantic provinces.....               | —                  | 7      | 1       | —        | —            | —       | —                | —                               | 29            | 37    |
| Quebec .....                          | 4                  | —      | 405     | —        | 1            | —       | —                | —                               | 272           | 682   |
| Ontario .....                         | 1                  | 340    | —       | 6        | 1            | 4       | 8                | —                               | 229           | 589   |
| Manitoba .....                        | —                  | —      | 16      | —        | 24           | 1       | —                | —                               | 5             | 46    |
| Saskatchewan.....                     | —                  | —      | —       | 7        | —            | 15      | —                | —                               | —             | 22    |
| Alberta .....                         | —                  | —      | 3       | 1        | 16           | —       | 23               | —                               | —             | 43    |
| British Columbia .....                | —                  | —      | 1       | —        | —            | 33      | —                | 27                              | —             | 61    |
| Yukon and Northwest Territories ..... | —                  | —      | —       | —        | —            | —       | 12               | —                               | —             | 12    |
| United States .....                   | 7                  | 4      | 201     | —        | 2            | 3       | 31               | —                               | —             | 248   |
| Total .....                           | 12                 | 351    | 627     | 14       | 44           | 56      | 74               | 27                              | 536           | 1,781 |

SOURCE: D.B.S. 53-207- Annual,  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)





MOTOR TRANSPORT TRAFFIC, NATIONAL ESTIMATES, 1958

TABLE 4. For Hire Trucks by Province

|  | Newfoundland | Prince Edward<br>Island | Nova Scotia | New Brunswick | Quebec  | Ontario   |           |
|--|--------------|-------------------------|-------------|---------------|---------|-----------|-----------|
| <b>Mileage:</b>                                  |              |                         |             |               |         |           |           |
| Total mileage travelled .....                    | '000         | 7,388                   | 1,947       | 15,925        | 9,417   | 292,167   | 520,787   |
| Average yearly mileage per truck .....           |              | 8,200                   | 13,700      | 16,200        | 19,100  | 21,700    | 31,100    |
| Average distance each ton was carried .....      |              | 7.1                     | 68.2        | 59.4          | 98.2    | 70.7      | 64.1      |
| Percentage of total mileage travelled empty .... |              | 44.7                    | 19.3        | 26.8          | 25.0    | 24.5      | 26.9      |
| <b>Fuel:</b>                                     |              |                         |             |               |         |           |           |
| Total gallons of gasoline consumed .....         | '000         | 814                     | 206         | 2,114         | 1,277   | 33,415    | 71,208    |
| Miles per gallon of gasoline .....               |              | 9.1                     | 9.5         | 7.5           | 6.3     | 6.9       | 5.9       |
| Total gallons of diesel oil consumed .....       | '000         | —                       | —           | —             | 145     | 10,035    | 15,287    |
| Miles per gallon of diesel oil .....             |              | —                       | —           | —             | 9.4     | 6.2       | 6.5       |
| Total gallons of other fuel consumed .....       |              | —                       | —           | —             | —       | —         | —         |
| Miles per gallon of other fuel .....             |              | —                       | —           | —             | —       | —         | —         |
| <b>Weight of goods carried:</b>                  |              |                         |             |               |         |           |           |
| Total tons of goods carried .....                | '000         | 1,828                   | 67          | 1,106         | 581     | 28,398    | 64,212    |
| Average weight carried <sup>1</sup> .....        | ton          | 3.2                     | 2.9         | 5.6           | 8.1     | 9.1       | 10.8      |
| <b>Net ton miles:</b>                            |              |                         |             |               |         |           |           |
| Total net ton miles performed .....              | '000         | 12,944                  | 4,595       | 65,741        | 57,119  | 2,006,747 | 4,113,548 |
| Average net ton miles per truck .....            |              | 14,300                  | 32,400      | 66,700        | 116,100 | 149,100   | 245,400   |
| <b>Capacity ton miles:</b>                       |              |                         |             |               |         |           |           |
| Total capacity ton miles <sup>2</sup> .....      | '000         | 32,126                  | 10,914      | 133,701       | 110,604 | 3,445,718 | 7,992,114 |
| Average capacity ton miles per truck .....       |              | 35,500                  | 76,900      | 135,700       | 224,800 | 256,000   | 476,800   |
| Percentage of capacity utilized .....            |              | 40.3                    | 42.1        | 49.2          | 51.6    | 58.2      | 51.5      |
| <b>Gross ton miles:</b>                          |              |                         |             |               |         |           |           |
| Total gross ton miles <sup>3</sup> .....         | '000         | 38,291                  | 11,859      | 146,856       | 120,939 | 3,939,690 | 8,094,806 |
| Average gross ton miles per truck .....          |              | 42,400                  | 83,500      | 149,100       | 245,800 | 292,700   | 482,900   |
| <b>Revenue:</b>                                  |              |                         |             |               |         |           |           |
| Total revenue .....                              | \$'000       | 2,262                   | 510         | 6,734         | 4,655   | 157,791   | 268,155   |
| Revenue per ton mile .....                       | ¢            | 17.5                    | 11.1        | 10.2          | 8.1     | 7.9       | 6.5       |
| Revenue per mile (total mileage travelled) ..... | ¢            | 30.6                    | 26.2        | 42.3          | 49.4    | 54.0      | 51.5      |
| Average revenue per truck .....                  | \$           | 2,500                   | 3,600       | 6,800         | 9,500   | 11,700    | 16,000    |
| Average annual population .....                  |              | 904                     | 142         | 985           | 492     | 13,461    | 16,763    |

|  | Manitoba | Saskatchewan | Alberta | British Columbia | Canada    |            |
|--|----------|--------------|---------|------------------|-----------|------------|
| <b>Mileage:</b>                                  |          |              |         |                  |           |            |
| Total mileage travelled .....                    | '000     | 63,645       | 68,969  | 231,430          | 87,599    | 1,299,274  |
| Average yearly mileage per truck .....           |          | 47,900       | 40,900  | 24,500           | 16,500    | 25,700     |
| Average distance each ton was carried .....      |          | 268.3        | 178.5   | 57.6             | 43.2      | 66.4       |
| Percentage of total mileage travelled empty .... |          | 17.7         | 30.4    | 33.3             | 29.7      | 27.5       |
| <b>Fuel:</b>                                     |          |              |         |                  |           |            |
| Total gallons of gasoline consumed .....         | '000     | 7,763        | 9,822   | 26,234           | 11,209    | 164,062    |
| Miles per gallon of gasoline .....               |          | 6.1          | 6.1     | 6.4              | 6.2       | 6.3        |
| Total gallons of diesel oil consumed .....       | '000     | 2,673        | 1,407   | 9,503            | 3,318     | 42,368     |
| Miles per gallon of diesel oil .....             |          | 6.1          | 6.5     | 6.5              | 5.3       | 6.3        |
| Total gallons of other fuel consumed .....       | '000     | —            | —       | 163              | —         | 163        |
| Miles per gallon of other fuel .....             |          | —            | —       | 6.8              | —         | 6.8        |
| <b>Weight of goods carried:</b>                  |          |              |         |                  |           |            |
| Total tons of goods carried .....                | '000     | 1,912        | 2,460   | 27,294           | 12,547    | 140,405    |
| Average weight carried <sup>1</sup> .....        | ton      | 9.8          | 9.2     | 10.2             | 8.8       | 9.9        |
| <b>Net ton miles:</b>                            |          |              |         |                  |           |            |
| Total net ton miles performed .....              | '000     | 512,985      | 439,126 | 1,572,082        | 541,869   | 9,326,756  |
| Average net ton miles per truck .....            |          | 386,000      | 260,600 | 166,500          | 102,200   | 187,700    |
| <b>Capacity ton miles:</b>                       |          |              |         |                  |           |            |
| Total capacity ton miles <sup>2</sup> .....      | '000     | 919,737      | 940,752 | 2,889,058        | 1,118,113 | 17,592,837 |
| Average capacity ton miles per truck .....       |          | 692,100      | 558,300 | 306,000          | 210,900   | 348,400    |
| Percentage of capacity utilized .....            |          | 55.8         | 46.7    | 54.4             | 48.5      | 53.0       |
| <b>Gross ton miles:</b>                          |          |              |         |                  |           |            |
| Total gross ton miles <sup>3</sup> .....         | '000     | 1,028,574    | 950,491 | 3,192,951        | 1,235,692 | 18,760,149 |
| Average gross ton miles per truck .....          |          | 773,900      | 564,100 | 338,200          | 233,100   | 371,500    |
| <b>Revenue:</b>                                  |          |              |         |                  |           |            |
| Total revenue .....                              | \$'000   | 28,572       | 26,740  | 87,838           | 47,742    | 630,999    |
| Revenue per ton mile .....                       | ¢        | 5.6          | 6.1     | 5.6              | 8.8       | 6.8        |
| Revenue per mile (total mileage travelled) ..... | ¢        | 44.9         | 38.8    | 38.0             | 54.5      | 48.6       |
| Average revenue per truck .....                  | \$       | 21,500       | 15,900  | 9,300            | 9,000     | 12,500     |
| Average annual population .....                  |          | 1,329        | 1,685   | 9,441            | 5,301     | 50,503     |

See footnotes page 18.

SOURCE: D.B.S. 53-207, Annual,  
MOTOR TRANSPORT TRAFFIC, National Estimates, (1958)





Appendix II  
Survey Response, by Type of Operation and Province, 1958

| Type of Operation  | New-found-land | Prince Edward Island | Nova Scotia  | New Brunswick | Quebec        | Ontario       | Manitoba     | Saskatchewan  | Alberta       | British Columbia | Canada        |
|--|----------------|----------------------|--------------|---------------|---------------|---------------|--------------|---------------|---------------|------------------|---------------|
| Total number of trucks selected in samples                               |                |                      |              |               |               |               |              |               |               |                  |               |
| For hire .....   | 384            | 69                   | 341          | 208           | 2,468         | 3,630         | 393          | 541           | 2,447         | 1,140            | 11,621        |
| Private:   |                |                      |              |               |               |               |              |               |               |                  |               |
| Intercity.....   | 859            | 507                  | 2,903        | 2,250         | 4,396         | 8,000         | 427          | 1,706         | 1,589         | 3,438            | 26,075        |
| Urban.....   | 468            | 183                  | 1,314        | 885           | 8,364         | 11,931        | 2,851        | 1,080         | 2,157         | 3,854            | 33,087        |
| Farm.....  | 147            | 572                  | 666          | 704           | 2,601         | 4,378         | 2,452        | 9,466         | 6,192         | 976              | 28,154        |
| <b>Total</b> .....   | <b>1,858</b>   | <b>1,331</b>         | <b>5,224</b> | <b>4,047</b>  | <b>17,829</b> | <b>27,839</b> | <b>6,123</b> | <b>12,793</b> | <b>12,385</b> | <b>9,408</b>     | <b>98,937</b> |
| Number of questionnaires returned completed                              |                |                      |              |               |               |               |              |               |               |                  |               |
| For hire .....   | 136            | 23                   | 155          | 89            | 1,332         | 1,928         | 256          | 294           | 977           | 608              | 5,798         |
| Private:   |                |                      |              |               |               |               |              |               |               |                  |               |
| Intercity.....   | 337            | 205                  | 1,420        | 930           | 2,044         | 4,008         | 264          | 728           | 763           | 1,620            | 12,319        |
| Urban.....   | 190            | 70                   | 644          | 364           | 3,945         | 5,985         | 1,331        | 483           | 1,047         | 1,834            | 15,893        |
| Farm.....  | 59             | 233                  | 339          | 295           | 939           | 2,275         | 829          | 2,924         | 2,566         | 482              | 10,941        |
| <b>Total</b> .....   | <b>722</b>     | <b>531</b>           | <b>2,558</b> | <b>1,678</b>  | <b>8,260</b>  | <b>14,196</b> | <b>2,680</b> | <b>4,429</b>  | <b>5,353</b>  | <b>4,544</b>     | <b>44,951</b> |
| Number of sampled trucks reported not in use during survey week          |                |                      |              |               |               |               |              |               |               |                  |               |
| For hire .....   | 127            | 22                   | 101          | 57            | 463           | 586           | 73           | 124           | 681           | 298              | 2,532         |
| Private:   |                |                      |              |               |               |               |              |               |               |                  |               |
| Intercity.....   | 233            | 103                  | 760          | 665           | 980           | 2,053         | 91           | 534           | 440           | 831              | 6,690         |
| Urban.....   | 107            | 39                   | 334          | 251           | 1,668         | 2,842         | 737          | 310           | 582           | 933              | 7,803         |
| Farm.....  | 40             | 106                  | 154          | 194           | 603           | 992           | 1,037        | 4,431         | 2,378         | 212              | 10,147        |
| <b>Total</b> .....   | <b>507</b>     | <b>270</b>           | <b>1,349</b> | <b>1,167</b>  | <b>3,714</b>  | <b>6,473</b>  | <b>1,938</b> | <b>5,399</b>  | <b>4,081</b>  | <b>2,274</b>     | <b>27,172</b> |
| Number of questionnaires not returned or returned incomplete or unusable |                |                      |              |               |               |               |              |               |               |                  |               |
| For hire .....   | 121            | 24                   | 85           | 62            | 673           | 1,116         | 64           | 123           | 789           | 234              | 3,291         |
| Private:   |                |                      |              |               |               |               |              |               |               |                  |               |
| Intercity.....   | 289            | 199                  | 723          | 655           | 1,372         | 1,939         | 72           | 444           | 386           | 987              | 7,066         |
| Urban.....   | 171            | 74                   | 336          | 270           | 2,751         | 3,104         | 783          | 287           | 528           | 1,087            | 9,391         |
| Farm.....  | 48             | 233                  | 173          | 215           | 1,059         | 1,111         | 586          | 2,111         | 1,248         | 282              | 7,066         |
| <b>Total</b> .....   | <b>629</b>     | <b>530</b>           | <b>1,317</b> | <b>1,202</b>  | <b>5,855</b>  | <b>7,270</b>  | <b>1,505</b> | <b>2,965</b>  | <b>2,951</b>  | <b>2,590</b>     | <b>26,814</b> |

Appendix III  
Reliability of Motor Transport Traffic Statistics, 1958

|  | Number of trucks reporting | Survey estimates | Sampling variability<br>(Two standard deviations) |                    | Range<br>(Col. 2 plus and minus col. 3) |                  |
|--|----------------------------|------------------|---|--------------------|---|------------------|
|  |                            |                  | Size  | Per cent of col. 2 | Lower limit                             | Upper limit      |
|  | (1)                        | (2)              | (3)   | (4)                | (5)                                     | (6)              |
|  |                            | '000             | '000  |                    | '000                                    | '000             |
| A. Traffic performed by Canadian registered trucks |                            |                  |   |                    |   |                  |
| Total mileage travelled                            |                            |                  |   |                    |   |                  |
|  |                            | miles            | miles   |                    | miles                                   | miles            |
| For hire .....                                     | 5,691                      | 1,299,274        | 25,985  | 2.0                | 1,273,289                               | 1,325,259        |
| Private:   |                            |                  |   |                    |   |                  |
| Intercity.....                                     | 12,220                     | 2,205,415        | 35,287  | 1.6                | 2,170,128                               | 2,240,702        |
| Urban.....   | 15,893                     | 2,090,989        | 29,274  | 1.4                | 2,061,715                               | 2,120,263        |
| Farm.....  | 10,940                     | 1,020,334        | 22,447  | 2.2                | 997,887                                 | 1,042,781        |
| <b>Total</b> .....                                 | <b>44,744</b>              | <b>6,616,012</b> | <b>52,928</b>                                     | <b>0.8</b>         | <b>6,563,084</b>                        | <b>6,668,940</b> |
| Weight of goods carried                            |                            |                  |   |                    |   |                  |
|  |                            | tons             | tons  |                    | tons                                    | tons             |
| For hire .....                                     | 5,604                      | 140,405          | 6,178   | 4.4                | 134,227                                 | 146,583          |
| Private:   |                            |                  |   |                    |   |                  |
| Intercity.....                                     | 8,675                      | 137,907          | 6,068   | 4.4                | 131,839                                 | 143,975          |
| Urban.....   | 11,450                     | 152,585          | 5,493   | 3.6                | 147,092                                 | 158,078          |
| Farm.....  | 7,452                      | 29,416           | 1,059   | 3.6                | 28,357                                  | 30,475           |
| <b>Total</b> .....                                 | <b>33,181</b>              | <b>460,313</b>   | <b>10,127</b>                                     | <b>2.2</b>         | <b>450,186</b>                          | <b>470,440</b>   |

SOURCE: D.B.S. 53-207- Annual  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)

MOTOR TRANSPORT TRAFFIC, NATIONAL ESTIMATES, 1958

Appendix III – Concluded  
Reliability of Motor Transport Traffic Statistics, 1958 – Concluded

|  | Number of trucks reporting<br><br>(1) | Survey estimates<br><br>(2) | Sampling variability<br>(Two standard deviations) |                           | Range<br>(Col. 2 plus and minus col. 3) |                    |
|--|---------------------------------------|-----------------------------|---|---------------------------|---|--------------------|
|  |                                       |                             | Size<br>(3)                                       | Per cent of col. 2<br>(4) | Lower limit<br>(5)                      | Upper limit<br>(6) |
|  |                                       | '000                        | '000  |                           | '000                                    | '000               |
| A. Traffic performed by Canadian registered trucks – Concluded |                                       |                             |   |                           |   |                    |
| Net ton miles  |                                       |                             |   |                           |   |                    |
|  |                                       | net ton miles               | net ton miles                                     |                           | net ton miles                           | net ton miles      |
| For hire .....   | 5,604                                 | 9,326,756                   | 279,803   | 3.0                       | 9,046,953                               | 9,606,559          |
| Private:   |                                       |                             |   |                           |   |                    |
| Intercity .....  | 8,669                                 | 4,309,895                   | 120,677   | 2.8                       | 4,189,218                               | 4,430,572          |
| Urban .....  | 11,431                                | 1,565,335                   | 37,568  | 2.4                       | 1,527,767                               | 1,602,903          |
| Farm .....   | 7,267                                 | 443,297                     | 20,392  | 4.6                       | 422,905                                 | 463,689            |
| Total .....  | 32,971                                | 15,645,283                  | 250,325   | 1.6                       | 15,394,958                              | 15,895,608         |
| Revenue earned   |                                       |                             |   |                           |   |                    |
|  |                                       | \$                          | \$  |                           | \$                                      | \$                 |
| For hire .....   | 921                                   | 630,999                     | 15,144  | 2.4                       | 615,855                                 | 646,143            |
| B. Interprovincial and international traffic                   |                                       |                             |   |                           |   |                    |
| Weight of goods carried  |                                       |                             |   |                           |   |                    |
|  |                                       | tons                        | tons  |                           | tons                                    | tons               |
| For hire .....   | 727                                   | 4,126                       | 239   | 5.8                       | 3,887                                   | 4,365              |
| Private:   |                                       |                             |   |                           |   |                    |
| Intercity .....  | 334                                   | 1,741                       | 226   | 13.0                      | 1,515                                   | 1,967              |
| Net ton miles  |                                       |                             |   |                           |   |                    |
|  |                                       | net ton miles               | net ton miles                                     |                           | net ton miles                           | net ton miles      |
| For hire .....   | 727                                   | 2,010,528                   | 112,590   | 5.6                       | 1,897,938                               | 2,123,118          |
| Private:   |                                       |                             |   |                           |   |                    |
| Intercity .....  | 334                                   | 384,709                     | 46,934  | 12.2                      | 337,775                                 | 431,643            |

Note: The chances are 95 out of 100 that the range (sample estimate  $\pm$  sampling variability) contains the true value. Consider "total mileage travelled" by for hire trucks. It can be assumed that the computed figure, 1,299,274,000 miles, will not be more than 25,985,600 miles (plus or minus 2.0 per cent of 1,299,274,000) away from the "true" value in 95 out of 100 cases. In other words, the chances are 95 out of 100 that the true value will fall within a range of 1,273,289,000 to 1,325,259,000.

Appendix IV  
Commodity Classification

|   |   |
|---|---|
| <p>Agricultural products:</p> <p>Flour</p> <p>Fruit</p> <p>Grain</p> <p>Grain products</p> <p>Sugar beets</p> <p>Vegetables</p> <p>Other agricultural products</p> <p>Animals and animal products:</p> <p>Animals and live poultry, n.o.s.<sup>1</sup></p> <p>Butter, cheese and eggs</p> <p>Cattle, calves and hogs</p> <p>Dressed meats and packing house products</p> <p>Fish</p> <p>Hides and skins</p> <p>Milk, cream</p> <p>Wool</p> <p>Other animal products</p> <p>Mine products:</p> <p>Coal and coke</p> <p>Crude petroleum</p> <p>Ore and concentrates</p> <p>Sand, gravel, crushed rock and fill</p> <p>Other mine products</p> | <p>Forest products:</p> <p>Cordwood, fuelwood</p> <p>Logs, poles, posts and ties</p> <p>Lumber, timber, lath, etc.</p> <p>Pulpwood</p> <p>Other forest products</p> <p>Manufactured products:</p> <p>Agricultural implements, farm tractors and parts</p> <p>Animal, fish or vegetable oil</p> <p>Automobiles and parts</p> <p>Building products, brick, cement, etc.</p> <p>Empty containers, wood or metal</p> <p>Fertilizers, chemicals and acids</p> <p>Food products, groceries, canned goods</p> <p>Furniture, furnishings and personal effects</p> <p>Gasoline</p> <p>Hardware</p> <p>Iron and steel products</p> <p>Machines, machinery and parts</p> <p>Metal products, n.o.s.</p> <p>Newspapers and other printed material</p> <p>Newsprint</p> <p>Paper products, n.o.s.</p> <p>Petroleum products, n.o.s.</p> <p>Rubber and rubber products</p> <p>Scrap and waste metal</p> <p>Soft drinks, beer and other beverages</p> <p>Textiles</p> <p>Tools and equipment</p> <p>Wood products, plywood, veneer, etc.</p> <p>Other manufactures</p> <p>General freight and miscellaneous</p> |
|---|---|

<sup>1</sup> n.o.s. – Not otherwise specified.

SOURCE: D.B.S. 53-207- Annual  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)



## DOMINION BUREAU OF STATISTICS

Appendix V  
Description of Vehicle Classifications, 1958

The following summary shows how the existing licensing systems in each province were used to group vehicles into the four functional truck classes. Where no separate licence categories existed, vehicles were classified according to the type of operation as indicated below:

| For hire trucks   | Private intercity trucks—Concluded   |
|---|--|
| <p>Atlantic provinces:<br/>No separate licence—</p> <p>Newfoundland—trucking operations for which revenue was received.</p> <p>Nova Scotia and Prince Edward Island—trucks operated for compensation on intercity routes and/or in urban areas, except those used in carrying mail, earth, sand or gravel; or used on government construction work; for the transportation of unprocessed products of the land, sea or forest; or by a farmer, fisherman or lumberman.</p> <p>New Brunswick—trucks owned by companies or individuals licensed by the Motor Carrier Board.</p> <p>Quebec:<br/>"L" licensed vehicles—operated for compensation in intercity or urban service.</p> <p>Ontario:<br/>Public Commercial Vehicles (P.C.V.)—operated for compensation outside urban areas (rural and intercity routes).</p> <p>Manitoba:<br/>Public Service Vehicles (P.S.V.)—operated for compensation beyond 15 miles radius of place of registration.</p> <p>Saskatchewan:<br/>"A" and "E" licensed vehicles—operated for compensation in transporting general merchandise over a route or by charter or for specified commodities provincially.</p> <p>Alberta:<br/>"E" and "P.S.V." licensed vehicles—operated for compensation in transporting general merchandise or specified commodities on intercity routes.</p> <p>British Columbia:<br/>"E", "G", "H" and "J" carrier licensed vehicles—operated for compensation in intercity service or in urban areas.</p> | <p>Alberta:<br/>"CV" licensed vehicles and that portion of "X" vehicles operated beyond 5 miles radius of place of registration.</p> <p>British Columbia:<br/>No separate licence—private non-farm trucks operated beyond urban areas.</p>   |
| Private intercity trucks  | Private urban trucks   |
| <p>Atlantic provinces:<br/>No separate licence—trucks operated on intercity routes by a fisherman or lumberman; or those used in transporting mail, sand or gravel, unprocessed products of the land, sea or forest; or used on government construction work; or privately owned trucks transporting owners' goods outside urban areas.</p> <p>Quebec:<br/>No separate licence—trucks with "F" licences operated outside urban areas.</p> <p>Ontario:<br/>No separate licence—private non-farm trucks operated outside urban areas.</p> <p>Manitoba:<br/>"C.T." licensed vehicles—private non-farm trucks which may operate beyond 15 miles radius of place of registration.</p> <p>Saskatchewan:<br/>No separate licence—trucks with "C" or "D" licences operated outside urban areas.</p>   | <p>Atlantic provinces:<br/>No separate licence—trucks operated in urban areas for transporting mail, earth, sand or gravel, unprocessed products of sea; or used on government construction work; and privately owned trucks transporting owners' goods in urban areas.</p> <p>Quebec:<br/>No separate licence—trucks with "F" licences operated in urban areas.</p> <p>Ontario:<br/>No separate licence—private trucks operated in urban areas.</p> <p>Manitoba:<br/>"T" and "DC" licensed vehicles—trucks operated within 15 miles radius of the place of registration.</p> <p>Saskatchewan:<br/>No separate licence—trucks with "C" or "D" licences operated within urban areas.</p> <p>Alberta:<br/>"C" licensed vehicles and that portion of "X" licences operated within 5 miles radius of place of registration.</p> <p>British Columbia:<br/>No separate licence—trucks which do not have a carrier licence and are operated within urban areas.</p> |
| Private intercity trucks  | Farm trucks  |
| <p>Atlantic provinces:<br/>No separate licence—trucks operated on intercity routes by a fisherman or lumberman; or those used in transporting mail, sand or gravel, unprocessed products of the land, sea or forest; or used on government construction work; or privately owned trucks transporting owners' goods outside urban areas.</p> <p>Quebec:<br/>No separate licence—trucks with "F" licences operated outside urban areas.</p> <p>Ontario:<br/>No separate licence—private non-farm trucks operated outside urban areas.</p> <p>Manitoba:<br/>"C.T." licensed vehicles—private non-farm trucks which may operate beyond 15 miles radius of place of registration.</p> <p>Saskatchewan:<br/>No separate licence—trucks with "C" or "D" licences operated outside urban areas.</p>   | <p>Atlantic provinces:<br/>Trucks owned and operated by a farmer including those with special farm licence in Nova Scotia.</p> <p>Quebec:<br/>"N" licensed vehicles—owned and operated by a farmer.</p> <p>Ontario:<br/>No separate licence—trucks owned and operated by a farmer.</p> <p>Manitoba:<br/>"FT" licensed vehicles—trucks owned and operated by a farmer.</p> <p>Saskatchewan:<br/>"F" licensed vehicles—trucks owned and operated by a farmer.</p> <p>Alberta:<br/>"F" licensed vehicles—trucks owned and operated by a farmer.</p> <p>British Columbia:<br/>No separate licence—trucks owned and operated by a farmer.</p>   |

SOURCE: D.B.S. 53-207-Annual,  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)

MOTOR TRANSPORT TRAFFIC, NATIONAL ESTIMATES, 1958

Appendix VI

DOMINION BUREAU OF STATISTICS

Transportation Section

TRUCKING SURVEY  
QUESTIONNAIRE  
1958

To be completed by all vehicle operators regardless of the purpose for which vehicle is used—and to be returned at end of Survey Week.

This questionnaire pertains only to the following vehicle:

SERIAL No. \_\_\_\_\_

The SURVEY WEEK, during which the owner of this vehicle is to report operating data,

begins  
SUNDAY  
morning

ends  
SATURDAY  
midnight

8504—110.1: 18-10-57

INSTRUCTIONS FOR REPORTING OPERATIONS

IF VEHICLE WAS USED FOR:

Answer questions on pages:

1. Personal transportation only (with no loads carried) 5,6,7
2. Urban operations (those within a town, city or metropolitan area and a five mile limit thereof) ..... 5,6,7,8 and 9
3. Intercity operations (those beyond a five mile limit of a town, city or metropolitan area) ..... 5,6,7 and 10
4. Intercity and urban operations ..... 5,6,7,8,9 and 10
5. Rural (including farm) operations (those beyond a five mile limit of a town, city or metropolitan area) 5,6,7 and 9,10
- IF VEHICLE WAS NOT USED ..... 5,6

If any assistance in completing this questionnaire is required, please write or phone the Transportation Section, Dominion Bureau of Statistics, Ottawa (phone nos. 9-67054 or 9-24275) or contact one of the Regional Offices listed below.

| City              | Address                                   | Phone No.             |
|-------------------|---|-----------------------|
| St. John's, Nfld. | 6 Freshwater Rd., (P.O. Box H-229)        | 3145                  |
| Halifax, N.S.     | 105 Hollis St., (P.O. Box 244)            | 3-7690                |
| Montreal, P.Q.    | Room 1016, Castle Bldg., 1410 Stanley St. | BE-4165               |
| Toronto, Ont.     | 215 Victoria St.                          | EM-8-5907             |
| Winnipeg, Man.    | 504 Winnipeg General Post Office          | WH-3-4528             |
| Edmonton, Alta.   | 533 Federal Public Bldg., 107th St.       | GA-4-0251 (Local 258) |
| Vancouver, B.C.   | Room 404, 326 Howe St.                    | PA-5288               |

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IMPORTANT INFORMATION – PLEASE READ CAREFULLY

Purpose

The Dominion Bureau of Statistics is conducting this survey in order to produce more complete statistics on all phases of Motor Truck Transportation.

Identification of Vehicle

Information contained in the large rectangle on the cover identifies the particular vehicle selected for this survey by serial number, gross vehicle weight, tare weight, make, year, and licence number, etc. N.B. Please do not substitute any other vehicle for the one indicated.

Method of Selection

Vehicles are chosen at random from provincial motor vehicle registration records without regard to owner, date of registration, age or make of vehicle. No particular vehicle will be surveyed more than once during any licence year.

Tractors

If the vehicle is a tractor, then the information requested will apply to the tractor-trailer combination.

Units of Measure

Goods carried may be reported in gallons, cubic yards, tons, etc., if impossible to estimate in pounds. If other than pounds, please indicate the unit used.

If Vehicle did not Operate

If this truck or tractor did not operate at all during the survey week or was not used off private property such as farm, quarry, lumber camp or industrial yard, please complete pages 5 and 6, mark the questionnaire "not used", and return.

If Vehicle Sold

If truck or tractor was sold or is no longer in your possession, or if for any reason you cannot complete the questionnaire, please indicate the reason under "remarks" on the last page and return the book in the envelope provided.

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QUESTIONS TO BE ANSWERED BY EVERYONE

To the best of my knowledge, the information provided in this questionnaire is complete and correct.

Signed by \_\_\_\_\_

Official Title \_\_\_\_\_

Name of Firm or Company \_\_\_\_\_

1. Is this vehicle used predominantly (check (✓) one)

- ☐ for revenue earning purposes (for hire or contract carrier)?
- ☐ to carry or distribute own goods on intercity routes?
- ☐ to carry or distribute own goods in urban areas?
- ☐ by a farmer to carry goods to and from the farm?
- ☐ for personal transportation?

2. Is this vehicle licensed in more than one province \_\_\_\_\_ ? (yes or no)

3. If yes, which provinces? ☐ Newfoundland ☐ Ontario
- ☐ Prince Edward Island ☐ Manitoba
- ☐ Nova Scotia ☐ Saskatchewan
- ☐ New Brunswick ☐ Alberta
- ☐ Quebec ☐ British Columbia
- ☐ Yukon and N.W.T.

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SOURCE: D.B.S. 53-207-Annual,  
MOTOR TRANSPORT TRAFFIC, National Estimates (1958)

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3



DOMINION BUREAU OF STATISTICS

TABLE 2. Selected Statistics by Commodity Groups

| Commodity classification             | For hire                |                                 |                     |                        |                          |               |                      |
|--------------------------------------|-------------------------|---------------------------------|---------------------|------------------------|--------------------------|---------------|----------------------|
|                                      | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton | Total revenue | Revenue per ton mile |
|                                      | '000 tons               | '000                            | '000                | tons                   | miles                    | \$'000        | ¢                    |
| Agricultural products .....          | 17                      | 487                             | 5,113               | 10.5                   | 309.8                    | 356           | 7.0                  |
| Animals and animal products .....    | 109                     | 14,216                          | 196,815             | 13.8                   | 1,799.0                  | 6,139         | 3.1                  |
| Mine products .....                  | —                       | —                               | —                   | —                      | —                        | —             | —                    |
| Forest products .....                | 47                      | 721                             | 11,337              | 15.7                   | 239.6                    | 519           | 4.6                  |
| Manufactures and miscellaneous ..... | 375                     | 23,628                          | 315,600             | 13.4                   | 841.3                    | 12,605        | 4.0                  |
| N.O.S. general freight .....         | 189                     | 16,942                          | 235,388             | 13.9                   | 1,247.1                  | 9,442         | 4.0                  |
| <b>Total</b> .....                   | <b>737</b>              | <b>55,994</b>                   | <b>764,253</b>      | <b>13.6</b>            | <b>1,036.8</b>           | <b>29,061</b> | <b>3.8</b>           |
|                                      | Private intercity       |                                 |                     |                        |                          |               |                      |
|                                      | Weight of goods carried | Total miles travelled with load | Total net ton miles | Average weight carried | Average distance per ton |               |                      |
|                                      | '000 tons               | '000                            | '000                | tons                   | miles                    |               |                      |
| Agricultural products .....          | 1                       | 1                               | 1                   | 1                      | 1                        |               |                      |
| Animals and animal products .....    |                         |                                 |                     |                        |                          |               |                      |
| Mine products .....                  |                         |                                 |                     |                        |                          |               |                      |
| Forest products .....                |                         |                                 |                     |                        |                          |               |                      |
| Manufactures and miscellaneous ..... |                         |                                 |                     |                        |                          |               |                      |
| N.O.S. general freight .....         |                         |                                 |                     |                        |                          |               |                      |
| <b>Total</b> .....                   |                         |                                 |                     |                        |                          |               |                      |

<sup>1</sup> Reliable estimates not available.

SECTION V. TRAFFIC PERFORMED BY ALBERTA REGISTERED BUSES INSIDE AND OUTSIDE THE PROVINCE  
JANUARY 1 – DECEMBER 31, 1958

TABLE 1. By Passenger Seating Capacity

|  | 0-19 | 20-29  | 30-39   | 40 and over | Total   |
|--|------|--------|---------|-------------|---------|
| <b>Mileage:</b>  |      |        |         |             |         |
| Total mileage travelled ..... '000                     | —    | 1,764  | 9,526   | 4,939       | 16,229  |
| Average yearly mileage per bus .....                   | —    | 33,900 | 57,000  | 96,900      | 60,100  |
| Average journey (average distance per passenger) ..... | —    | 51.9   | 93.8    | 94.8        | 90.0    |
| <b>Fuel:</b>   |      |        |         |             |         |
| Total gallons of gasoline consumed ..... '000          | —    | 156    | 409     | 63          | 628     |
| Miles per gallon of gasoline .....                     | —    | 6.2    | 5.6     | 8.1         | 6.0     |
| Total gallons of diesel oil consumed ..... '000        | —    | 105    | 920     | 528         | 1,553   |
| Miles per gallon of diesel oil .....                   | —    | 7.7    | 7.9     | 8.4         | 8.0     |
| Total gallons of other fuel consumed ..... '000        | —    | —      | —       | —           | —       |
| Miles per gallon of other fuel .....                   | —    | —      | —       | —           | —       |
| <b>Passengers and passenger miles:</b>                 |      |        |         |             |         |
| Total number of passengers carried ..... '000          | —    | 268    | 1,494   | 956         | 2,718   |
| Total number of passenger miles ..... '000             | —    | 13,909 | 140,033 | 90,620      | 244,562 |
| Average number of passengers carried per mile .....    | —    | 7.9    | 14.7    | 18.3        | 15.1    |
| <b>Capacity:</b>                                       |      |        |         |             |         |
| Total capacity seat miles ..... '000                   | —    | 48,303 | 345,665 | 211,207     | 605,175 |
| Percentage of capacity utilized .....                  | —    | 28.8   | 40.5    | 42.9        | 40.4    |
| <b>Revenue:</b>  |      |        |         |             |         |
| Total passenger revenue ..... \$'000                   | —    | 467    | 4,606   | 2,180       | 7,253   |
| Revenue per mile (total mileage travelled)..... ¢      | —    | 26.5   | 48.4    | 44.1        | 44.7    |
| Revenue per passenger mile ..... ¢                     | —    | 3.4    | 3.3     | 2.4         | 3.0     |
| Revenue per bus ..... \$                               | —    | 9,000  | 27,600  | 42,700      | 26,900  |

SOURCE: D.B.S. 53-213 - Annual,  
MOTOR TRANSPORT TRAFFIC - Province of Alberta (1958)

MOTOR TRANSPORT TRAFFIC, ALBERTA, 1958

SECTION VI. TRAFFIC PERFORMED BY ALBERTA REGISTERED BUSES WITHIN THE PROVINCE  
JANUARY 1 – DECEMBER 31, 1958

TABLE 1. By Passenger Seating Capacity

|  |        | 0-19 | 20-29  | 30-39   | 40 and over | Total   |
|--|--------|------|--------|---------|-------------|---------|
| <b>Mileage:</b>                                      |        |      |        |         |             |         |
| Total mileage travelled .....                        | '000   | —    | 1,742  | 3,765   | 2,890       | 8,397   |
| Average yearly mileage per bus .....                 |        | —    | 33,500 | 22,500  | 56,700      | 31,100  |
| Average journey (average distance per passenger).... |        | —    | 52.3   | 68.1    | 72.1        | 67.3    |
| <b>Fuel:</b>   |        |      |        |         |             |         |
| Total gallons of gasoline consumed .....             | '000   | —    | 152    | 235     | 33          | 420     |
| Miles per gallon of gasoline .....                   |        | —    | 6.2    | 5.7     | 7.8         | 6.0     |
| Total gallons of diesel oil consumed .....           | '000   | —    | 105    | 293     | 312         | 710     |
| Miles per gallon of diesel oil .....                 |        | —    | 7.7    | 8.3     | 8.4         | 8.3     |
| Total gallons of other fuel consumed .....           | '000   | —    | —      | —       | —           | —       |
| Miles per gallon of other fuel .....                 |        | —    | —      | —       | —           | —       |
| <b>Passengers and passenger miles:</b>               |        |      |        |         |             |         |
| Total number of passengers carried .....             | '000   | —    | 263    | 844     | 701         | 1,808   |
| Total number of passenger miles .....                | '000   | —    | 13,750 | 57,458  | 50,530      | 121,738 |
| Average number of passengers carried per mile .....  |        | —    | 7.9    | 15.3    | 17.5        | 14.5    |
| <b>Capacity:</b>                                     |        |      |        |         |             |         |
| Total capacity seat miles .....                      | '000   | —    | 47,856 | 135,286 | 126,981     | 310,123 |
| Percentage of capacity utilized .....                |        | —    | 28.7   | 42.5    | 39.8        | 39.3    |
| <b>Revenue:</b>                                      |        |      |        |         |             |         |
| Total passenger revenue .....                        | \$'000 | —    | 455    | 1,429   | 1,306       | 3,190   |
| Revenue per mile (total mileage travelled) .....     | ¢      | —    | 26.1   | 38.0    | 45.2        | 38.0    |
| Revenue per passenger mile .....                     | ¢      | —    | 3.3    | 2.5     | 2.6         | 2.6     |
| Revenue per bus .....                                | \$     | —    | 8,700  | 8,600   | 25,600      | 11,800  |

Appendix 1

| Type of operation | A. Population  |                                   |   |                                     |   |   |   |
|-------------------|--|-----------------------------------|---|-------------------------------------|---|---|---|
|                   | 0-2½ tons<br>0-5,000<br>lbs.   | 2½-5 tons<br>5,001-10,000<br>lbs. | 5-7½ tons<br>10,001-15,000<br>lbs.                | 7½-10 tons<br>15,001-20,000<br>lbs. | 10-15 tons<br>20,001-30,000<br>lbs.                                   | Over 15 tons<br>30,001 lbs.<br>and over | Total   |
|                   | Estimated average Alberta truck population January 1 — December 31, 1958 |                                   |   |                                     |   |   |   |
| For hire .....    | 144  | 459                               | 210   | 1,638                               | 4,803   | 2,187                                   | 9,441   |
| Private:          |  |                                   |   |                                     |   |   |   |
| Intercity .....   | 9,054  | 3,471                             | 661   | 1,246                               | 1,176   | 442                                     | 16,050  |
| Urban .....       | 16,057   | 3,360                             | 683   | 2,378                               | 1,053   | 506                                     | 24,037  |
| Farm .....        | 31,896   | 17,064                            | 2,964   | 11,238                              | 1,839   | 15                                      | 65,016  |
| Total .....       | 57,151   | 24,354                            | 4,518   | 16,500                              | 8,871   | 3,150                                   | 114,544   |
|                   | B. Survey Response   |                                   |   |                                     |   |   |   |
|                   | Total number of<br>trucks selected<br>in samples                         |                                   | Number of<br>questionnaires<br>returned completed |                                     | Number of sampled<br>trucks reported not in<br>use during survey week |   | Number of questionnaires<br>not returned or returned<br>incomplete and unusable |
| For hire .....    | 2,447  |                                   | 977   |                                     | 681   |   | 789   |
| Private:          |  |                                   |   |                                     |   |   |   |
| Intercity .....   | 1,589  |                                   | 763   |                                     | 440   |   | 386   |
| Urban .....       | 2,157  |                                   | 1,047   |                                     | 582   |   | 528   |
| Farm .....        | 6,192  |                                   | 2,566   |                                     | 2,378   |   | 1,248   |
| Total .....       | 12,385   |                                   | 5,353   |                                     | 4,081   |   | 2,951   |

SOURCE: D.B.S. 53-213- Annual,  
MOTOR TRANSPORT TRAFFIC – Province of Alberta (1958)





DOMINION BUREAU OF STATISTICS

TABLE 3. Registrations of Motor Vehicles, Drivers, etc., 1958

Revised

| No. | Registration year ending:                           | Canada           | New-<br>foundland<br>31/3/59 | Prince<br>Edward<br>Island<br>31/3/59 | Nova<br>Scotia<br>31/3/59 | New<br>Brunswick<br>31/12/58 |
|-----|---|------------------|------------------------------|---------------------------------------|---------------------------|------------------------------|
|     | <b>Motor vehicle licences:</b>                      |                  |                              |                                       |                           |                              |
|     | <b>Passenger automobiles:</b>                       |                  |                              |                                       |                           |                              |
| 1   | New .....   | ..               | 5,084                        | ..                                    | 20,146                    | ..                           |
| 2   | Renewals .....                                      | ..               | 31,930                       | ..                                    | 99,423                    | ..                           |
| 3   | Total .....   | 3,550,380        | 37,014                       | 15,860                                | 119,569                   | 90,767                       |
| 4   | Taxicabs .....                                      | ..               | 2                            | 2                                     | 1                         | 661                          |
| 5   | Drive yourself .....                                | ..               | 2                            | 2                                     | 2                         | 2                            |
| 6   | <b>Total passenger automobiles .....</b>            | <b>3,572,963</b> | <b>37,014</b>                | <b>15,860</b>                         | <b>119,569</b>            | <b>91,428</b>                |
|     | <b>Motor trucks:</b>                                |                  |                              |                                       |                           |                              |
| 7   | New .....   | ..               | 1,587                        | ..                                    | 3,485                     | ..                           |
| 8   | Renewals .....                                      | ..               | 11,664                       | ..                                    | 32,245                    | ..                           |
| 9   | Total .....   | 1,038,290        | 13,251                       | 6,796                                 | 35,730                    | 23,907                       |
| 10  | Truck tractors .....                                | ..               | 5                            | 6                                     | 6                         | 11                           |
| 11  | <b>Total trucks and tractors .....</b>              | <b>1,040,912</b> | <b>13,256</b>                | <b>6,796</b>                          | <b>35,730</b>             | <b>23,907</b>                |
|     | <b>Buses:</b>                                       |                  |                              |                                       |                           |                              |
| 12  | Motor buses .....                                   | 8,616*           | 162 <sup>7</sup>             | 8                                     | 156                       | 172                          |
| 13  | Trolley coaches .....                               | ..               | —                            | —                                     | 87                        | —                            |
| 14  | School buses .....                                  | ..               | 3                            | 6                                     | 502                       | 322                          |
| 15  | <b>Total buses .....</b>                            | <b>15,181*</b>   | <b>162<sup>7</sup></b>       | <b>8</b>                              | <b>745</b>                | <b>494</b>                   |
| 16  | Motorcycles .....                                   | 33,873           | 280                          | 117                                   | 1,003                     | 893                          |
| 17  | Other motor vehicles <sup>9</sup> .....             | 56,545*          | 863                          | 2,723                                 | 7,907                     | 4,993                        |
|     | <b>Total motor vehicles:</b>                        |                  |                              |                                       |                           |                              |
| 18  | 1958 .....  | 4,719,474        | 51,575                       | 25,504                                | 164,954                   | 121,715                      |
| 19  | 1957 .....  | 4,497,091        | 47,982                       | 23,725                                | 164,286                   | 116,712                      |
| 20  | Increase 1958 vs 1957 .....                         | 222,383          | 3,593                        | 1,779                                 | 668                       | 5,003                        |
| 21  | Per cent change .....                               | + 4.9            | + 7.5                        | + 7.5                                 | + 0.4                     | + 4.3                        |
| 22  | <b>Trailer licences .....</b>                       | <b>262,895</b>   | <b>748</b>                   | <b>1,390</b>                          | <b>8,371</b>              | <b>5,897</b>                 |
|     | <b>Other licences:</b>                              |                  |                              |                                       |                           |                              |
| 23  | Drivers' licences .....                             | 4,131,481        | 58,350                       | 26,439                                | 157,117                   | 106,259                      |
| 24  | Chauffeurs' licences .....                          | 1,441,557        | 11                           | 1,970                                 | 37,879                    | 43,846                       |
|     | <b>Dealers':</b>                                    |                  |                              |                                       |                           |                              |
| 25  | Licences .....                                      | 6,147            | 39                           | 26                                    | 328                       | 381                          |
| 26  | Plates .....  | 15,319           | 131                          | 87                                    | 987                       | 732                          |
| 27  | Gasoline outlets .....                              | 43,390           | 533                          | 353                                   | 1,921 <sup>17</sup>       | 1,742                        |
| 28  | Garage licences .....                               | 23,570*          | 2                            | 21                                    | 8                         | 1,133                        |
|     | <b>Average population per motor vehicle:</b>        |                  |                              |                                       |                           |                              |
| 29  | 1958 .....  | 3.6              | 8.5                          | 3.9                                   | 4.3                       | 4.7                          |
| 30  | 1957 .....  | 3.7              | 8.9                          | 4.2                                   | 4.3                       | 4.8                          |
|     | <b>Average population per passenger car:</b>        |                  |                              |                                       |                           |                              |
| 31  | 1958 .....  | 4.8              | 11.8                         | 6.3                                   | 5.9                       | 6.3                          |
| 32  | 1957 .....  | 4.9              | 12.4                         | 6.8                                   | 5.9                       | 6.5                          |
|     | <b>Average number of passenger cars per family:</b> |                  |                              |                                       |                           |                              |
| 33  | 1958 .....  | 0.90             | 0.43                         | 0.69                                  | 0.77                      | 0.75                         |
| 34  | 1957 .....  | 0.88             | 0.39                         | 0.73                                  | 0.76                      | 0.75                         |

<sup>1</sup> N.W.T. estimated.

<sup>2</sup> Included with passenger automobiles.

<sup>3</sup> Included with motor buses.

<sup>4</sup> Yukon Territory only.

<sup>5</sup> Includes 38 U-Drive trucks.

<sup>6</sup> Included with trucks.

<sup>7</sup> Includes station wagons and seven-passenger cars used as buses.

<sup>8</sup> No licence required.

<sup>9</sup> Includes farm tractors.

<sup>10</sup> P.S.V. and commercial trailers only, remainder included with trucks.

SOURCE: L.B.S. 53-203 Annual,  
THE MOTOR VEHICLE (1958)



DOMINION BUREAU OF STATISTICS

TABLE 8. Tax on Gasoline and Other Motive Fuels -- Continued

| Province and<br>effective date | Tax<br>per<br>gallon | Refund and exemptions   |  |
|--------------------------------|----------------------|-------------------------|--|
|                                |                      | Amount<br>per<br>gallon | Uses   |
|                                | cents                | cents                   |  |
| <b>New Brunswick—Con.:</b>     |                      |                         |  |
| Apr. 1, 1932 .....             | 7                    | 7                       | Farmers and fishermen in connection with their calling as such.  |
| Nov. 1, 1933 .....             | 7                    | 7                       | Other than in motor vehicles on public highways.   |
| Apr. 1, 1934 .....             | 8                    | 8                       | " " " " " " " "  |
| Mar. 20, 1938 .....            | 10                   | 10                      | " " " " " " " "  |
| June 7, 1939 .....             |                      |                         | Other than in motor vehicles on public highways except on road and bridge contracts.   |
| June 1, 1941 .....             |                      |                         | Exempt marked gasoline for use other than in motor vehicles on public highways except in repair and construction of bridges and roads.   |
| Apr. 1, 1947 .....             | 13                   | 10                      | Marked gasoline subject to 3 cent tax.   |
| Apr. 1, 1954 .....             | 15                   | 12                      | " " " " " 3 " "  |
|                                |                      |                         | Diesel fuel now included.  |
| <b>Quebec:</b>                 |                      |                         |  |
| Apr. 1, 1924 .....             | 2                    | 2                       | Other than in motor vehicles on public highways.   |
| Apr. 1, 1925 .....             | 3                    | 3                       | " " " " " " " "  |
| Apr. 1, 1928 .....             | 5                    | 5                       | " " " " " " " "  |
| Dec. 17, 1931 .....            | 6                    | 6                       | " " " " " " " "  |
| May 1, 1935 .....              |                      |                         | Farm tractors, fishing boats, stationary engines, manufacturing processes and fire pumps.  |
| Apr. 18, 1939 .....            | 8                    | 8                       | Same as above.   |
| June 1, 1940 .....             |                      |                         | All aerial navigation.   |
| Apr. 1, 1947 .....             | 11                   | 11                      | Same as above.   |
| Nov. 8, 1950 .....             | 13                   | 13                      | Same as above.   |
| Jan. 10, 1957 .....            |                      |                         | Refunds for fuel oil only when used for heating or cleaning purposes.  |
| <b>Ontario:</b>                |                      |                         |  |
| May 11, 1925 .....             | 3                    | 3                       | Refunds for purposes other than propelling a vehicle on any highway.   |
| Mar. 28, 1929 .....            | 5                    | 5                       | Same as above.   |
| May 29, 1929 .....             |                      |                         | Refunds to cities and separated towns on municipally-owned commercial vehicles.  |
| Mar. 25, 1932 .....            | 6                    | 6                       | Same as above.   |
| Jan. 24, 1935 .....            |                      |                         | Refunds to contractors discontinued covering maintenance and construction on any highway.  |
| Apr. 1, 1939 .....             | 8                    | 8                       | Same as above.   |
| July 1, 1943 .....             |                      |                         | Tax exemptions to farmers, fishermen, tourist guides and tourist outfitters.   |
| Oct. 1, 1945 .....             |                      |                         | Discontinued tax exemption system.   |
| Jan. 1, 1947 .....             |                      |                         | Refunds discontinued to cities and separated towns on gasoline used in municipally-owned commercial vehicles, also the maintenance and construction of streets, roads, highways.   |
| Apr. 1, 1947 .....             | 11                   | 11                      | Same as above.   |
| Feb. 22, 1957 .....            | 13                   | 13                      | Government of Canada, farming and commercial fishing.  |
|                                |                      | 11                      | For all other claims.  |
| Apr. 1, 1957 .....             |                      |                         | Solvents, naphthas, thinners, and all types of fuel oil excluded from Gasoline Tax Act.  |
|                                | 20 <sup>1</sup>      | 20 <sup>1</sup>         | Refunds for purposes other than propelling a vehicle on any highway, but not for equipment engaged in roadwork.  |
| Apr. 1, 1958 .....             | 18½ <sup>1</sup>     | 18½ <sup>1</sup>        | Same as above.   |
| <b>Manitoba:</b>               |                      |                         |  |
| Apr. 27, 1923 .....            | 1                    |                         |  |
| Mar. 5, 1925 .....             | 3                    | 2                       | Gasoline used in tractors etc. in threshing, ploughing, grinding grain, lumbering, commercial fishing boats and any mining or manufacturing purpose other than in the operation of motor vehicles.   |
| Mar. 31, 1926 .....            |                      | 2                       | All gasoline not used in operation of motor vehicles.  |
| Apr. 14, 1930 .....            | 5                    | 5                       | Same as above.   |
| May 7, 1932 .....              | 7                    | 5                       | Same as above.   |
| Apr. 28, 1933 .....            |                      | 5                       | Gasoline used in fishing vessels to limit of 15 gallons per day operated; threshing machines and combines; municipal fire apparatus.   |
| Mar. 31, 1939 .....            |                      |                         | Gasoline used in agricultural machinery, aircraft, fire apparatus. Motor on canoes for commercial trapping, prospecting, freighting and fishing.   |
| Apr. 5, 1940 .....             |                      | 7                       | Same as above.   |
| Mar. 30, 1943 .....            |                      |                         | Aviation gasoline for aircraft exempt of tax by permit.  |
| July 1, 1945 .....             |                      |                         | Motive Fuel Users Tax Act became effective.  |
|                                | 7                    | 7                       | Motive fuel other than gasoline for moving or operating fire apparatus of a municipal corporation; agricultural machinery; hospital machinery.   |
|                                | 7                    | 6                       | Motive fuel other than gasoline for the operation of motor boats; stationary engines; portable engines, tractors and trucks when used otherwise than on a public highway; railway cars and other motor vehicles running only upon rails or tracks; any industrial purpose otherwise than in the operation of motor vehicles; propelling aircraft; machinery for making or repairing roads or drainage works. |

<sup>1</sup> Applies to the following fuels: diesel, domestic, furnace, stove oil, kerosene, distillate, light, medium and heavy fuel oil but not bunker. Gasoline tax remains at 13 cents per gallon.

SOURCE: D.B.S. 53-203 Annual.  
THE MOTOR VEHICLE (1958)

















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DOMINION BUREAU OF STATISTICS

TABLE 2. Size and Weight Regulations for Commercial Vehicles in Effect March 31, 1959

| No.                           |   |     | Newfound-<br>land  | Prince<br>Edward<br>Island            | Nova<br>Scotia                             |        |
|-------------------------------|---|-----|--|---------------------------------------|--|--------|
| Size limits                   |   |     |  |                                       |  |        |
| 1                             | Overall length—Bus .....  | Ft. | N.S.   | 33                                    | 36   |        |
| 2                             | “ “ — Truck .....   | “   | N.S.   | 33                                    | 36   |        |
| 3                             | “ “ — Semi-Trailer .....  | “   | N.S.   | 33                                    | 36   |        |
| 4                             | “ “ — Trailer .....   | “   | N.S.   | 33                                    | 36   |        |
| 5                             | “ “ — Combinations .....  | “   | N.S.   | 85                                    | 65—or more<br>by special<br>permit         |        |
| 6                             | Maximum width .....   | In. | 96   | 96                                    | 96   |        |
| 7                             | Maximum height .....  | “   | N.S.   | 174                                   | 144  |        |
| 8                             | Trailing units permitted .....                                  | No. | 1  | Limited only<br>by length<br>of train | 1  |        |
| 9                             | Tandem axle spacing—Minimum .....                               | In. | N.S.   | N.S.                                  | 48   |        |
| Practical gross weight limits |   |     |  |                                       |  |        |
| Trucks and combinations:      |   |     |  |                                       |  |        |
| 10                            | 2-axle truck .....  | Lb. |   | 24,000                                | 24,000 <sup>1</sup><br>22,000 <sup>2</sup> | 22,000 |
| 11                            | 3-axle truck .....  | “   |   | N.S.                                  | 36,000 <sup>1</sup><br>32,000 <sup>2</sup> | 30,000 |
| 12                            | 2-axle truck and one 2-axle full trailer .....                  | “   |   | N.S.                                  | 54,000 <sup>1</sup><br>48,000 <sup>2</sup> | N.P.   |
| 13                            | 2-axle truck and two 2-axle full trailers .....                 | “   |  | N.P.                                  | N.P.                                       | N.P.   |
| 14                            | 2-axle truck and one 3-axle full trailer .....                  | “   |   | N.S.                                  | 54,000 <sup>1</sup><br>48,000 <sup>2</sup> | N.P.   |
| 15                            | 2-axle truck and two 3-axle full trailers .....                 | “   |  | N.P.                                  | N.P.                                       | N.P.   |
| 16                            | 2-axle truck, 3-axle full trailer and 2-axle full trailer ..... | “   |  | N.P.                                  | N.P.                                       | N.P.   |
| 17                            | 3-axle truck and 2-axle full trailer .....                      | “   |   | N.S.                                  | 54,000 <sup>1</sup><br>48,000 <sup>2</sup> | N.P.   |
| 18                            | 3-axle truck and two 2-axle full trailers .....                 | “   |  | N.P.                                  | N.P.                                       | N.P.   |
| 19                            | 3-axle truck and 3-axle full trailer .....                      | “   |   | N.S.                                  | 54,000 <sup>1</sup><br>48,000 <sup>2</sup> | N.P.   |
| 20                            | 3-axle truck and two 3-axle full trailers .....                 | “   |  | N.P.                                  | N.P.                                       | N.P.   |
| 21                            | 3-axle truck, 3-axle full trailer and 2-axle full trailer ..... | “   |  | N.P.                                  | N.P.                                       | N.P.   |

For footnotes see pages 8 and 9.

SOURCE: D.B.S. 53-204 Annual,  
THE MOTOR VEHICLE PRELIMINARY REPORT OF REGISTRATIONS AND SIZE,  
WEIGHT AND SAFETY REGULATIONS (1958)

THE MOTOR VEHICLE

TABLE 2. Size and Weight Regulations for Commercial Vehicles in Effect March 31, 1959

| New Brunswick                              | Quebec                                     | Ontario                          | Manitoba                        | Saskatchewan                  | Alberta                        | British Columbia                   | No. |
|--|--|----------------------------------|---------------------------------|-------------------------------|--------------------------------|------------------------------------|-----|
|  |  |                                  |                                 |                               |                                |                                    |     |
| 35   | 35   | 35                               | 35                              | 35                            |                                | 35                                 | 1   |
| 35   | 35   | 33                               | 35                              | 35                            |                                | 35                                 | 2   |
| 35   | 35   | Combination not to exceed 50 ft. | 50                              | 50—tractor and semi-trailer   | 35 ft. wheel base              | 35                                 | 3   |
| 35   | 35   | 33                               | 35                              | 35                            |                                | 35 (40 on certain highways)        | 4   |
| 50   | 50   | 50                               | 60                              | 60                            | 60                             | 50 (60 on certain highways)        | 5   |
| 96   | 96   | 96                               | 96                              | 96                            | 96                             | 96—Loads of hay etc. up to 120 in. | 6   |
| 150  | 150  | 162                              | 156                             | 156                           | 162                            | 150 (162 on certain highways)      | 7   |
| 1  | 1  | Combination not to exceed 50 ft. | 1                               | N.S.                          | 1                              | 1 (2 on certain highways)          | 8   |
| N.S.                                       | N.S.                                       | N.S.                             | 40                              | N.S.                          | 42                             | N.S.                               | 9   |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 24,000 <sup>1</sup><br>22,000 <sup>2</sup> | 27,000 <sup>3</sup>                        | 28,000                           | 26,000                          | 24,000                        | 24,000                         | 26,000                             | 10  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 36,000 <sup>1</sup><br>32,000 <sup>2</sup> | 28,000 <sup>3</sup><br>34,000 <sup>4</sup> | 40,000                           | 40,000                          | 40,000                        | 38,000                         | 40,000                             | 11  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 54,000 <sup>1</sup><br>48,000 <sup>2</sup> | 44,000 <sup>3</sup><br>50,000 <sup>4</sup> | 56,000                           | 44,000                          | 48,000<br>58,000 <sup>5</sup> | 56,000                         | 61,500                             | 12  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 84,000                           | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 13  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 60,000 <sup>1</sup><br>54,000 <sup>2</sup> | 44,000<br>50,000 <sup>4</sup>              | 68,000                           | 44,000 <sup>6</sup><br>(58,000) | 48,000                        | 62,000<br>(Specified highways) | 61,500                             | 14  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 108,000                          | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 15  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 96,000                           | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 16  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 60,000 <sup>1</sup><br>54,000 <sup>2</sup> | 44,000 <sup>3</sup><br>50,000 <sup>4</sup> | 68,000                           | 44,000 <sup>6</sup><br>(72,000) | 48,000                        | 62,000<br>(Specified highways) | 61,600                             | 17  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 96,000                           | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 18  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| 60,000 <sup>1</sup><br>54,000 <sup>2</sup> | 44,000 <sup>3</sup><br>50,000 <sup>4</sup> | 80,000                           | 44,000 <sup>6</sup><br>(72,000) | 48,000                        | 62,000<br>(Specified highways) | 64,800                             | 19  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 120,000                          | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 20  |
|  |  |                                  |                                 |                               |                                |                                    |     |
| N.P.                                       | N.P.                                       | 108,000                          | N.P.                            | 48,000                        | N.P.                           | 73,300                             | 21  |





**STATEMENT OF HIGHWAY TRAFFIC AT CANADIAN BORDER BY PORTS**  
MAY

1960

| Port of Entry  | Foreign Vehicles Entering Canada                             |                  |                         |                        | Canadian Vehicles Returning to Canada |                  |                        |
|--|--|------------------|-------------------------|------------------------|---------------------------------------|------------------|------------------------|
|  | Length of Stay in Canada                                     |                  | Repeats<br>and<br>Taxis | Commercial<br>Vehicles | Length of Stay Abroad                 |                  | Commercial<br>Vehicles |
|  | 24 hours<br>or less  | Over<br>24 hours |                         |                        | 24 hours<br>or less                   | Over<br>24 hours |                        |
| <b>Vehicles transported<br/>by boat direct from the<br/>United States*</b> ..... | -  | 329              | -                       | 91                     | 26                                    | 114              | 53                     |
|  | <b>Newfoundland<br/>Prince Edward Island<br/>Nova Scotia</b> |                  |                         |                        |                                       |                  |                        |
|  | <b>New Brunswick</b>   |                  |                         |                        |                                       |                  |                        |
| Andover .....  | 3,702  | 807              | 1,129                   | 59                     | 5,843                                 | 84               | 665                    |
| Beaconsfield .....   | 45   | 7                | 64                      | 32                     | 121                                   | 23               | 46                     |
| Belleville .....   | 48   | 9                | 124                     | 5                      | 342                                   | 23               | 86                     |
| Bloomfield .....   | 94   | 21               | 149                     | 12                     | 430                                   | 18               | 122                    |
| Campobello .....   | 123  | 32               | 60                      | 18                     | 1,085                                 | 4                | 239                    |
| Centreville .....  | 1,182  | 346              | 698                     | 455                    | 3,451                                 | 136              | 428                    |
| Clair .....  | 1,261  | 901              | 7,155                   | 649                    | 10,092                                | 778              | 750                    |
| Edmundston .....   | 4,217  | 1,599            | 29,701                  | 2,525                  | 39,548                                | 818              | 2,318                  |
| Fairhaven .....  | -  | 2                | -                       | -                      | -                                     | -                | -                      |
| Forest City .....  | 75   | 13               | 181                     | 78                     | 454                                   | 2                | 93                     |
| Fosterville .....  | 106  | 45               | 325                     | -                      | 805                                   | 8                | 50                     |
| Four Falls .....   | 23   | 7                | 96                      | 40                     | 256                                   | 1                | 51                     |
| Gillespie .....  | 2,022  | 430              | 1,442                   | 6                      | 2,861                                 | 19               | 256                    |
| Grand Falls .....  | 587  | 161              | 2,160                   | 89                     | 3,674                                 | 20               | 293                    |
| Mars Hill Road .....   | 75   | 7                | 25                      | 4                      | 88                                    | -                | 8                      |
| Milltown .....   | 186  | 254              | 4,600                   | 214                    | 9,403                                 | 261              | 365                    |
| River de Chute .....   | 323  | 19               | 24                      | 15                     | 274                                   | -                | 28                     |
| St. Andrews .....  | -  | 1                | -                       | -                      | -                                     | -                | -                      |
| St. Croix .....  | 88   | 558              | 6,238                   | 389                    | 7,822                                 | 1,343            | 461                    |
| St. Leonard .....  | 2,781  | 761              | 14,482                  | 1,023                  | 16,079                                | 868              | 1,171                  |
| St. Stephen .....  | 1,358  | 2,102            | 32,180                  | 1,813                  | 37,785                                | 3,832            | 2,501                  |
| Union Corner .....   | 72   | 9                | 111                     | 4                      | 438                                   | 13               | 71                     |
| Union Mills .....  | 42   | 36               | 3,160                   | 118                    | 5,788                                 | 42               | 272                    |
| Woodstock Road .....   | 1,785  | 971              | 6,719                   | 239                    | 20,596                                | 1,018            | 792                    |
| <b>Provincial Total.....</b>   | 20,195   | 9,098            | 110,823                 | 7,787                  | 167,235                               | 9,311            | 11,066                 |

\*As Newfoundland, Prince Edward Island, and Nova Scotia have no ports of entry adjacent to the United States boundary, vehicles proceeding to these provinces (with the exception of those transported direct from the United States by boat) enter through ports in other provinces and are recorded in the latter.

SOURCE: D.B.S. 66-001- Monthly,  
TRAVEL BETWEEN CANADA AND THE UNITED STATES (May 1960)





TRAVEL BETWEEN CANADA AND OTHER COUNTRIES

TABLE 10. Number and Expenditures of Canadian Travellers Returning to Canada via Rail in 1958, Classified by Length of Visit

| Days stay      | Number of persons | % of total persons | Average expenditure per person | Estimated expenditures | % of total expenditures | Number of person - days | Average expenditure per person per day |
|----------------|-------------------|--------------------|--------------------------------|------------------------|-------------------------|-------------------------|--|
|                |                   |                    | \$                             | \$                     |                         |                         | \$                                     |
| 1 .....        | 8,406             | 2.07               | 40.95                          | 344,257                | 0.61                    | 8,406                   | 40.95                                  |
| 2 .....        | 45,088            | 11.12              | 66.98                          | 3,020,079              | 5.36                    | 90,176                  | 33.49                                  |
| 3 .....        | 72,695            | 17.93              | 76.34                          | 5,503,383              | 9.76                    | 218,085                 | 25.24                                  |
| 4 .....        | 45,665            | 11.26              | 94.16                          | 4,299,772              | 7.63                    | 182,660                 | 23.54                                  |
| 5 .....        | 33,519            | 8.27               | 108.09                         | 3,623,066              | 6.43                    | 167,595                 | 21.62                                  |
| 6 .....        | 19,842            | 4.89               | 115.82                         | 2,298,166              | 4.08                    | 119,052                 | 19.30                                  |
| 7 .....        | 26,384            | 6.51               | 112.10                         | 2,957,531              | 5.25                    | 184,688                 | 16.01                                  |
| 8 .....        | 16,276            | 4.02               | 116.96                         | 1,903,564              | 3.38                    | 130,208                 | 14.62                                  |
| 9 .....        | 8,161             | 2.01               | 120.27                         | 981,560                | 1.74                    | 73,449                  | 13.36                                  |
| 10 .....       | 21,653            | 5.34               | 120.67                         | 2,612,813              | 4.64                    | 216,530                 | 12.07                                  |
| 11 .....       | 3,672             | 0.91               | 148.59                         | 545,640                | 0.97                    | 40,392                  | 13.51                                  |
| 12 .....       | 9,863             | 2.43               | 155.67                         | 1,535,362              | 2.72                    | 118,356                 | 12.97                                  |
| 13 .....       | 3,413             | 0.84               | 167.44                         | 571,473                | 1.01                    | 44,369                  | 12.88                                  |
| 14 .....       | 17,827            | 4.40               | 190.55                         | 3,396,931              | 6.03                    | 249,578                 | 13.61                                  |
| 15 .....       | 5,502             | 1.36               | 183.81                         | 1,011,320              | 1.79                    | 82,530                  | 12.25                                  |
| 16 .....       | 4,685             | 1.16               | 224.37                         | 1,051,195              | 1.86                    | 74,960                  | 14.02                                  |
| 17 .....       | 3,295             | 0.81               | 229.06                         | 754,739                | 1.34                    | 56,015                  | 13.47                                  |
| 18 .....       | 3,834             | 0.94               | 200.74                         | 769,622                | 1.37                    | 69,012                  | 11.15                                  |
| 19 .....       | 2,057             | 0.51               | 201.10                         | 413,671                | 0.73                    | 39,083                  | 10.58                                  |
| 20 .....       | 3,964             | 0.98               | 223.79                         | 887,091                | 1.57                    | 79,280                  | 11.19                                  |
| 21 .....       | 7,612             | 1.88               | 206.68                         | 1,573,230              | 2.79                    | 159,852                 | 9.84                                   |
| 22 .....       | 2,033             | 0.50               | 257.33                         | 523,160                | 0.93                    | 44,726                  | 11.70                                  |
| 23 .....       | 1,524             | 0.38               | 276.47                         | 421,347                | 0.75                    | 35,052                  | 12.02                                  |
| 24 .....       | 1,449             | 0.36               | 270.83                         | 392,439                | 0.70                    | 34,776                  | 11.28                                  |
| 25 .....       | 1,279             | 0.32               | 281.86                         | 360,498                | 0.64                    | 31,975                  | 11.27                                  |
| 26 .....       | 967               | 0.24               | 383.93                         | 371,256                | 0.66                    | 25,142                  | 14.77                                  |
| 27 .....       | 1,063             | 0.26               | 272.32                         | 289,476                | 0.51                    | 28,701                  | 10.09                                  |
| 28 .....       | 2,652             | 0.65               | 259.78                         | 688,925                | 1.22                    | 74,256                  | 9.28                                   |
| 29 .....       | 582               | 0.14               | 287.40                         | 167,264                | 0.30                    | 16,878                  | 9.91                                   |
| 30- 39 .....   | 11,496            | 2.84               | 283.44                         | 3,258,411              | 5.78                    | 368,273                 | 8.85                                   |
| 40- 49 .....   | 4,851             | 1.20               | 397.22                         | 1,926,925              | 3.42                    | 211,609                 | 9.11                                   |
| 50- 59 .....   | 1,774             | 0.44               | 404.10                         | 716,882                | 1.27                    | 95,004                  | 7.55                                   |
| 60- 69 .....   | 3,243             | 0.80               | 358.51                         | 1,162,663              | 2.06                    | 201,054                 | 5.78                                   |
| 70- 79 .....   | 1,193             | 0.29               | 460.04                         | 548,833                | 0.97                    | 89,140                  | 6.16                                   |
| 80- 89 .....   | 980               | 0.24               | 508.85                         | 498,669                | 0.88                    | 81,684                  | 6.10                                   |
| 90- 99 .....   | 2,067             | 0.51               | 664.24                         | 1,372,992              | 2.44                    | 189,446                 | 7.25                                   |
| 100- 119 ..... | 891               | 0.22               | 609.98                         | 543,489                | 0.96                    | 95,279                  | 5.70                                   |
| 120- 139 ..... | 1,019             | 0.25               | 619.40                         | 631,165                | 1.12                    | 126,413                 | 4.99                                   |
| 140- 169 ..... | 995               | 0.25               | 659.09                         | 655,794                | 1.16                    | 151,049                 | 4.34                                   |
| 170- 199 ..... | 1,186             | 0.29               | 654.98                         | 776,806                | 1.38                    | 212,076                 | 3.66                                   |
| 200-over ..... | 723               | 0.18               | 1,392.21                       | 1,006,571              | 1.79                    | 192,802                 | 5.22                                   |
| Total .....    | 405,380           | 100.00             | 139.05                         | 56,368,030             | 100.00                  | 4,709,611               | 11.97                                  |

SOURCE: D.B.S. 66-201, Annual,  
TRAVEL BETWEEN CANADA AND OTHER COUNTRIES (1958)







DOMINION BUREAU OF STATISTICS

TABLE 2. Highway and Rural Road Expenditure, 1958

| No. |   | Canada       | Newfound-<br>land | Prince<br>Edward<br>Island | Nova<br>Scotia | New<br>Brunswick |
|-----|---|--------------|-------------------|----------------------------|----------------|------------------|
|     |   | dollars      |                   |                            |                |                  |
|     | Total expenditures:   |              |                   |                            |                |                  |
| 1   | Total construction <sup>1,2</sup> .....                       | 535,577,276  | 15,422,240        | 5,442,721                  | 17,526,726     | 23,200,007       |
| 2   | Total maintenance .....                                       | 209,903,710  | 5,921,000         | 1,634,229                  | 12,397,624     | 15,798,897       |
| 3   | Total administration and general <sup>3</sup> ....            | 24,176,849   | 781,277           | 72,080                     | 1,774,992      | 1,134,982        |
| 4   | Grand total expenditures <sup>1,2,3</sup> .....               | 772,748,991  | 22,124,517        | 7,149,030                  | 31,699,342     | 40,133,886       |
|     | Federal expenditures:   |              |                   |                            |                |                  |
| 5   | Construction <sup>1</sup> .....                               | 23,214,323   | 3,922,240         | 2,252                      | 238,086        | 183,794          |
| 6   | Maintenance .....   | 4,487,832    | —                 | 10,707                     | 199,994        | 30,335           |
| 7   | Administration and general <sup>3</sup> .....                 | 3,062,800    | 368,777           | 170                        | 28,501         | 5,340            |
| 8   | Net subsidies and grants-in-aid (Paid<br>+, Received -) ..... | + 67,434,387 | + 4,682,967       | +1,317,509                 | + 4,951,993    | +10,492,660      |
| 9   | Total <sup>1,3</sup> .....                                    | 98,199,342   | 8,973,984         | 1,330,638                  | 5,418,574      | 10,712,129       |
|     | Provincial expenditures:                                      |              |                   |                            |                |                  |
| 10  | Construction .....  | 457,545,262  | 11,500,000        | 5,440,405                  | 17,277,045     | 23,001,505       |
| 11  | Maintenance .....   | 157,503,295  | 5,921,000         | 1,623,522                  | 12,112,458     | 15,768,562       |
| 12  | Administration and general .....                              | 19,257,354   | 412,500           | 70,110                     | 1,534,466      | 1,100,542        |
| 13  | Net subsidies and grants-in-aid (Paid<br>+, Received -) ..... | - 17,793,685 | - 4,682,967       | -1,315,709                 | - 5,212,860    | -11,042,686      |
| 14  | Total .....   | 616,512,226  | 13,150,533        | 5,818,328                  | 25,711,109     | 28,827,923       |
|     | Municipal expenditures:                                       |              |                   |                            |                |                  |
| 15  | Construction .....  | 54,257,361   | ..                | ...                        | ...            | ...              |
| 16  | Maintenance .....   | 47,613,093   | ..                | ...                        | ...            | ...              |
| 17  | Administration and general .....                              | 1,112,683    | ..                | ...                        | ...            | ...              |
| 18  | Net subsidies and grants-in-aid (Paid<br>+, Received -) ..... | - 50,701,690 | ..                | ...                        | + 213,767      | ...              |
| 19  | Total .....   | 55,372,603   | ..                | ...                        | 213,767        | ...              |
| 20  | Net expenditures by others <sup>2</sup> .....                 | 2,664,820    | —                 | 64                         | 355,892        | 593,834          |
| 21  | Grand total expenditures <sup>1,2,3</sup> .....               | 772,748,991  | 22,124,517        | 7,149,030                  | 31,699,342     | 40,133,886       |

<sup>1</sup> Includes payments for railway grade crossings from Railway Grade Crossing Fund, allocated by provinces as in Table 7.

<sup>2</sup> Includes payments for railway grade crossings by railways allocated by provinces as in Table 7.

<sup>3</sup> Includes \$242,100 federal administrative costs re Trans-Canada Highway - not allocated by provinces.

TABLE 3. Revenue Earned by Highway and Rural Road Toll Facilities, 1958

| No. |   | Canada     | Newfound-<br>land | Prince<br>Edward<br>Island | Nova<br>Scotia | New<br>Brunswick |
|-----|---|------------|-------------------|----------------------------|----------------|------------------|
|     |   | dollars    |                   |                            |                |                  |
| 1   | Domestic toll bridges, tunnels and ferries <sup>1</sup> ..... | 9,999,394  | 70,000            | ...                        | 1,727,438      | ...              |
| 2   | Controlled access toll highways .....                         | 31,134     | ...               | ...                        | ...            | ...              |
| 3   | Licences for travel in National Parks ..                      | 467,160    | —                 | —                          | —              | —                |
| 4   | Total revenues .....  | 10,497,688 | 70,000            | —                          | 1,727,438      | —                |

<sup>1</sup> For revenues from international facilities see "International Toll Bridges, Tunnels and Ferries" report.

SOURCE: D.B.S. 53-201, Annual,

ROAD AND STREET MILEAGE AND EXPENDITURE (1958)  
formerly HIGHWAYS STATISTICS

ROAD AND STREET MILEAGE AND EXPENDITURE

TABLE 2. Highway and Rural Road Expenditure, 1958

| Quebec      | Ontario      | Manitoba                | Saskat-<br>chewan | Alberta     | British<br>Columbia  | Yukon<br>Territory | Northwest<br>Territories | No. |
|-------------|--------------|-------------------------|-------------------|-------------|----------------------|--------------------|--------------------------|-----|
| dollars     |              |                         |                   |             |                      |                    |                          |     |
| 121,934,188 | 172,480,378  | 25,676,864              | 32,177,138        | 46,868,117  | 67,897,619           | 3,121,653          | 3,829,625                | 1   |
| 53,400,913  | 60,143,039   | 4,791,324               | 11,708,143        | 24,362,277  | 17,088,678           | 2,545,403          | 112,183                  | 2   |
| 3,429,533   | 7,347,486    | 1,649,152               | 2,732,186         | 905,963     | 3,692,097            | 415,001            | ..                       | 3   |
| 178,764,634 | 239,970,903  | 35,208,496 <sup>4</sup> | 46,617,467        | 72,136,357  | 88,678,394           | 6,082,057          | 3,941,808                | 4   |
| 2,110,267   | 1,971,779    | 348,803                 | 489,673           | 3,625,500   | 4,226,350            | 2,284,415          | 3,811,164                | 5   |
| 287,397     | 315,336      | 55,565                  | 69,664            | 491,438     | 1,599,212            | 1,331,337          | 96,847                   | 6   |
| 263,715     | 935          | ..                      | 3,727             | 285,568     | 1,448,966            | 415,001            | ..                       | 7   |
| ...         | + 23,277,761 | + 3,203,312             | + 1,612,500       | + 3,005,104 | +13,130,372          | +1,767,753         | - 7,544                  | 8   |
| 2,661,379   | 25,565,811   | 3,607,680               | 2,175,564         | 7,407,610   | 20,404,900           | 5,798,506          | 3,900,467                | 9   |
| 118,738,891 | 135,119,326  | 25,328,061              | 16,415,678        | 40,274,786  | 63,593,866           | 837,238            | 18,461                   | 10  |
| 52,935,749  | 32,218,095   | 4,735,759               | 7,542,078         | 7,971,349   | 15,445,321           | 1,214,066          | 15,336                   | 11  |
| 2,977,339   | 7,346,551    | 1,630,670               | 1,636,597         | 620,395     | 1,928,184            | ..                 | ..                       | 12  |
| + 976,598   | + 10,593,827 | - 3,402,556             | + 3,839,795       | + 7,202,019 | -12,988,937          | -1,767,753         | + 7,544                  | 13  |
| 175,628,577 | 185,277,799  | 28,291,934              | 29,434,148        | 56,068,549  | 67,978,434           | 283,551            | 41,341                   | 14  |
| 976,598     | 35,119,316   | ..                      | 15,263,569        | 2,897,878   | ..                   | ...                | ...                      | 15  |
| 7,594       | 27,609,608   | ..                      | 4,096,401         | 15,899,490  | ..                   | ...                | ...                      | 16  |
| 20,821      | ..           | ..                      | 1,091,862         | ..          | ..                   | ...                | ...                      | 17  |
| - 976,598   | - 34,471,436 | + 217,726               | - 5,478,026       | -10,207,123 | ..                   | ...                | ...                      | 18  |
| 28,415      | 28,257,488   | 3,308,882 <sup>4</sup>  | 14,973,806        | 8,590,245   | ..                   | ...                | ...                      | 19  |
| 446,263     | 869,805      | -                       | 33,949            | 69,953      | 295,060 <sup>5</sup> | -                  | -                        | 20  |
| 178,764,634 | 239,970,903  | 35,208,496 <sup>4</sup> | 46,617,467        | 72,136,357  | 88,678,394           | 6,082,057          | 3,941,808                | 21  |

<sup>4</sup> Includes expenditure of \$3,091,156 by municipalities in Manitoba for which no breakdown is available.  
<sup>5</sup> Decrease from 1957 due to inclusion with provincial expenditures in this report of some expenditures previously reported as "by others".

TABLE 3. Revenue Earned by Highway and Rural Road Toll Facilities, 1958

| Quebec    | Ontario | Manitoba | Saskat-<br>chewan | Alberta | British<br>Columbia | Yukon<br>Territory | Northwest<br>Territories | No. |
|-----------|---------|----------|-------------------|---------|---------------------|--------------------|--------------------------|-----|
| dollars   |         |          |                   |         |                     |                    |                          |     |
| 3,225,856 | 170,732 | 6,386    | ...               | ...     | 4,798,982           | ...                | ...                      | 1   |
| 31,134    | ...     | ...      | ...               | ...     | ...                 | ...                | ...                      | 2   |
| ...       | 21,669  | 40,002   | 9,860             | 321,229 | 74,400              | ...                | ...                      | 3   |
| 3,256,990 | 192,401 | 46,388   | 9,860             | 321,229 | 4,873,382           | ...                | ...                      | 4   |





## URBAN TRANSIT - MARCH, 1960

|                                     | NEWFOUNDLAND |         | NOVA SCOTIA |           | NEW BRUNSWICK |         |
|-------------------------------------|--------------|---------|-------------|-----------|---------------|---------|
|                                     | 1960         | 1959    | 1960        | 1959(r)   | 1960          | 1959    |
| No. of firms reporting .....        | 1            | 1       | 4           | 4         | 2             | 2       |
| <b>Passengers</b>                   |              |         |             |           |               |         |
| Electric car .....                  | -            | -       | -           | -         | -             | -       |
| Trolley coach .....                 | -            | -       | 1,615,768   | 1,642,904 | -             | -       |
| Motor bus .....                     | 535,557      | 510,124 | 512,068     | 525,773   | 922,018       | 927,322 |
| Chartered <sup>2</sup> .....        | -            | -       | -           | -         | 6,305         | 5,448   |
| TOTAL .....                         | 535,557      | 510,124 | 2,127,836   | 2,168,677 | 928,323       | 932,770 |
| <b>Vehicle Miles</b>                |              |         |             |           |               |         |
| Electric car .....                  | -            | -       | -           | -         | -             | -       |
| Trolley coach .....                 | -            | -       | 217,870     | 235,600   | -             | -       |
| Motor bus .....                     | 123,810      | 89,139  | 163,143     | 173,406   | 184,650       | 184,954 |
| Chartered <sup>3</sup> .....        | -            | -       | 3,312       | 3,780     | 2,194         | 1,790   |
| TOTAL .....                         | 123,810      | 89,139  | 384,325     | 412,786   | 186,844       | 186,744 |
| <b>Fuel Consumed</b>                |              |         |             |           |               |         |
| Gasoline .....Gals.                 | 3,050        | 6,286   | 32,559      | 36,762    | 2,817         | 2,817   |
| Liquefied petroleum gases.....Gals. | -            | -       | -           | -         | -             | -       |
| Diesel oil .....Gals.               | 20,933       | 14,387  | 7,822       | 4,396     | 40,228        | 38,439  |
| Total Revenue ..... \$              | 70,099       | 63,955  | 247,642     | 254,217   | 101,630       | 101,900 |

|                                     | MANITOBA  |           | SASKATCHEWAN  |               | ALBERTA   |           |
|-------------------------------------|-----------|-----------|---------------|---------------|-----------|-----------|
|                                     | 1960      | 1959      | 1960          | 1959          | 1960      | 1959      |
| No. of firms reporting .....        | 2         | 2         | 3             | 3             | 4         | 4         |
| <b>Passengers</b>                   |           |           |               |               |           |           |
| Electric car .....                  | -         | -         | -             | -             | -         | -         |
| Trolley coach .....                 | 2,327,940 | 2,318,277 | 532,557       | 506,988       | 3,180,506 | 3,229,390 |
| Motor bus .....                     | 3,270,497 | 3,199,647 | (4) 1,329,493 | (4) 1,199,324 | 1,670,093 | 1,584,920 |
| Chartered <sup>2</sup> .....        | -         | -         | 33            | 207           | -         | -         |
| TOTAL .....                         | 5,598,437 | 5,517,924 | 1,862,083     | 1,706,519     | 4,850,599 | 4,814,310 |
| <b>Vehicle Miles</b>                |           |           |               |               |           |           |
| Electric car .....                  | -         | -         | -             | -             | -         | -         |
| Trolley coach .....                 | 452,825   | 439,635   | 178,696       | 176,697       | 543,024   | 528,860   |
| Motor bus .....                     | 778,061   | 721,753   | 180,828       | 142,969       | 492,939   | 471,926   |
| Chartered <sup>3</sup> .....        | -         | -         | 639           | 505           | 4,458     | 3,466     |
| TOTAL .....                         | 1,230,886 | 1,161,388 | 360,163       | 320,171       | 1,040,421 | 1,004,252 |
| <b>Fuel Consumed</b>                |           |           |               |               |           |           |
| Gasoline .....Gals.                 | 23,520    | 18,649    | 14,541        | 18,073        | 45,368    | 52,301    |
| Liquefied petroleum gases.....Gals. | -         | -         | -             | -             | 25,838    | 22,451    |
| Diesel oil .....Gals.               | 116,963   | 110,198   | 19,660        | 11,287        | 40,255    | 31,034    |
| Total Revenue ..... \$              | 741,904   | 732,064   | 194,001       | 180,230       | 580,911   | 560,214   |

(r) 1959 data are revised.

(1) Includes Toronto Rapid Transit (subway): 3,225,892 passengers (3,110,517 in 1959); 630,612 miles (592,340 in 1959).

(2) The number of passengers carried in chartered service is only approximate, as exact counts are not made for all trips.

(3) Includes miles run by all classes of vehicles in chartered service.

(4) Includes passengers carried by Trolley coaches of the Regina Transit System for which no breakdown is available.

SOURCE: D.B.S.53-003 - Monthly,  
URBAN TRANSIT (Class Carriers Only) March 1960.





## DOMINION BUREAU OF STATISTICS

TABLE 12. Income Account of Major Urban Transit Systems

| No. |   | St. John's<br>Transportation<br>Commission | Nova Scotia<br>Light and<br>Power<br>Halifax | City<br>Transit<br>Saint John | Quebec<br>Autobus Ltd.<br>Quebec City | Montreal<br>Transportation<br>Commission |
|-----|---|--|--|-------------------------------|---------------------------------------|--|
|     |   | dollars                                    |  |                               |                                       |  |
|     | <b>Operating revenue:</b>                                 |  |  |                               |                                       |  |
| 1   | Passenger revenue .....                                   | 467,667                                    | 2,003,525                                    | 785,342                       | 3,043,829                             | 34,378,609                               |
| 2   | Other transportation revenue (chart-<br>ered, etc.) ..... | 8,566                                      | 973  | 9,818                         | 172,111                               | 1,224,944                                |
| 3   | Other operating revenue .....                             | 1,763                                      | 6,501  | 8,146                         | 34,429                                | 417,170                                  |
| 4   | <b>Total operating revenue .....</b>                      | <b>477,996</b>                             | <b>2,010,999</b>                             | <b>803,306</b>                | <b>3,250,369</b>                      | <b>36,020,723</b>                        |
|     | <b>Operating expenses:</b>                                |  |  |                               |                                       |  |
| 5   | Operators' and conductors' wages and<br>bonuses .....     | 159,431                                    | 612,792                                      | 245,593                       | 943,595                               | 10,423,218                               |
| 6   | Maintenance and repair expense .....                      | 78,027                                     | 189,439                                      | 221,546                       | 489,312                               | 6,507,252                                |
| 7   | Fuel for revenue equipment .....                          | 67,452                                     | —  | 132,661                       | 278,579                               | 1,066,279                                |
| 8   | Power purchased for revenue equip-<br>ment .....          | —  | 223,184                                      | —                             | —                                     | 420,194                                  |
| 9   | Insurance and safety expense .....                        | 21,371                                     | 20,003                                       | 19,010                        | 92,650                                | 1,110,040                                |
| 10  | Franchise expense .....                                   | —  | —  | 28,100                        | —                                     | —  |
| 11  | Operating taxes and licenses .....                        | 7,932                                      | 81,771                                       | 20,954                        | 235,348                               | 1,811,634                                |
| 12  | Non-recurring expenses .....                              | 5,713                                      | —  | —                             | —                                     | —  |
| 13  | Operating rents (net) .....                               | —  | —  | 7,800                         | —                                     | —  |
| 14  | All other operating expenses .....                        | 29,517                                     | 613,947                                      | 43,891                        | 817,371                               | 8,463,089                                |
| 15  | Depreciation expense .....                                | 91,153                                     | 143,660                                      | 31,105                        | 213,525                               | 4,156,623                                |
| 16  | Amortization of transit operating<br>property .....       | —  | —  | 10,000                        | 22,245                                | —  |
| 17  | Property gain chargeable to opera-<br>tions .....         | —  | —  | —                             | —                                     | —  |
| 18  | <b>Total operating expenses .....</b>                     | <b>460,596</b>                             | <b>1,884,796</b>                             | <b>760,660</b>                | <b>3,092,625</b>                      | <b>33,958,329</b>                        |
| 19  | <b>Net operating revenue (or deficit) ..</b>              | <b>17,400</b>                              | <b>126,203</b>                               | <b>42,646</b>                 | <b>157,744</b>                        | <b>2,062,394</b>                         |
| 20  | Rent for lease of transit property — Debit                | —  | —  | —                             | —                                     | —  |
| 21  | Income from lease of transit property —<br>Credit .....   | —  | —  | —                             | —                                     | —  |
| 22  | <b>Net transit operating income (or<br/>loss) .....</b>   | <b>17,400</b>                              | <b>126,203</b>                               | <b>42,646</b>                 | <b>157,744</b>                        | <b>2,062,394</b>                         |
| 23  | <b>Total other income .....</b>                           | <b>—</b>                                   | <b>4,584,796</b>                             | <b>8,352</b>                  | <b>22,666</b>                         | <b>352,058</b>                           |
| 24  | <b>Gross income (or loss) .....</b>                       | <b>17,400</b>                              | <b>4,710,999</b>                             | <b>50,998</b>                 | <b>180,410</b>                        | <b>2,414,452</b>                         |
| 25  | <b>Total deductions .....</b>                             | <b>16,900</b>                              | <b>1,201,208</b>                             | <b>11,555</b>                 | <b>11,524</b>                         | <b>3,123,484</b>                         |
| 26  | Net income (or loss) before income tax                    | 500  | 3,509,791                                    | 39,443                        | 168,886                               | Dr. 709,032                              |
| 27  | Provision for income tax .....                            | —  | 1,490,317                                    | 18,538                        | 88,474                                | —  |
| 28  | <b>Net income (or loss) .....</b>                         | <b>500</b>                                 | <b>2,019,474</b>                             | <b>20,905</b>                 | <b>80,412</b>                         | <b>Dr. 709,032</b>                       |

<sup>1</sup> Includes earned surplus of \$52,292 on North Yonge Bus to be paid to Municipality of Richmond Hill, Twp. of Mark-  
ham and Twp. of Vaughan.

**SOURCE:** D.B.S. 53-216, Annual,  
URBAN TRANSIT (1958)



URBAN TRANSIT

TABLE 12. Income Account of Major Urban Transit Systems

| Ottawa<br>Transportation<br>Commission | Toronto<br>Transit<br>Commission | Hamilton<br>Street<br>Railway | Greater<br>Winnipeg<br>Transit<br>Commission | Regina<br>Transit<br>System | Edmonton<br>Transit<br>System | Calgary<br>Transit<br>System | British<br>Columbia<br>Electric<br>Railway | No. |
|--|----------------------------------|-------------------------------|--|-----------------------------|-------------------------------|------------------------------|--|-----|
| dollars                                |                                  |                               |  |                             |                               |                              |  |     |
| 4,465,640                              | 36,070,577                       | 3,734,409                     | 8,022,641                                    | 977,317                     | 3,418,414                     | 2,867,538                    | 12,795,380                                 | 1   |
| 156,822                                | 662,976                          | 74,348                        | 74,077                                       | 7,021                       | 143,095                       | 89,138                       | 244,552                                    | 2   |
| 66,308                                 | 520,072                          | —                             | 109,009                                      | 27,141                      | 31,112                        | —                            | —  | 3   |
| 4,688,770                              | 37,253,625                       | 3,808,757                     | 8,205,727                                    | 1,011,479                   | 3,592,621                     | 2,956,676                    | 13,039,932                                 | 4   |
| 1,546,180                              | 9,922,264                        | 1,187,963                     | 2,649,103                                    | 456,659                     | 1,270,566                     | 1,112,981                    | 5,748,223                                  | 5   |
| 1,349,719                              | 12,558,661                       | 688,102                       | 1,737,631                                    | 224,696                     | 882,580                       | 735,573                      | 2,260,611                                  | 6   |
| 156,184                                | 959,268                          | 268,605                       | 227,753                                      | 20,334                      | 90,106                        | 90,728                       | 382,459                                    | 7   |
| 107,401                                | 2,064,484                        | 59,940                        | 293,023                                      | 52,173                      | 93,820                        | 102,878                      | 282,446                                    | 8   |
| 161,306                                | 636,592                          | 214,539                       | 175,309                                      | 11,378                      | 17,346                        | 48,712                       | 195,570                                    | 9   |
| —                                      | 53,391                           | —                             | —  | —                           | —                             | —                            | 648,353                                    | 10  |
| 293,817                                | 1,025,205                        | 67,897                        | 252,031                                      | 22,692                      | 256,645                       | 2                            | 689,162                                    | 11  |
| 21,503                                 | —                                | 15,346                        | —  | —                           | —                             | —                            | —  | 12  |
| 32,740                                 | Cr. 135,368                      | Cr. 11,868                    | —  | —                           | —                             | —                            | Cr. 1,661                                  | 13  |
| 985,484                                | 3,421,500                        | 532,601                       | 1,328,059                                    | 166,875                     | 626,040                       | 556,130                      | 3,368,688                                  | 14  |
| —                                      | 3,636,268                        | 292,509                       | 772,576                                      | —                           | 228,455                       | 120,000                      | 1,595,103                                  | 15  |
| —                                      | —                                | —                             | 176,435                                      | 169,295                     | 172,339                       | 190,000                      | —  | 16  |
| —                                      | —                                | —                             | Cr. 8,008                                    | —                           | —                             | —                            | —  | 17  |
| 4,654,334                              | 34,142,265                       | 3,315,634                     | 7,603,912                                    | 1,124,102                   | 3,637,897                     | 2,957,002                    | 15,168,954                                 | 18  |
| 34,436                                 | 3,111,360                        | 493,123                       | 601,815                                      | Dr. 112,623                 | Dr. 45,276                    | Dr. 326                      | Dr. 2,129,022                              | 19  |
| —                                      | —                                | —                             | —  | —                           | —                             | —                            | —  | 20  |
| —                                      | —                                | —                             | —  | —                           | —                             | —                            | —  | 21  |
| 34,436                                 | 3,111,360                        | 493,123                       | 601,815                                      | Dr. 112,623                 | Dr. 45,276                    | Dr. 326                      | Dr. 2,129,022                              | 22  |
| 3,175                                  | 138,047                          | 2,565                         | —  | —                           | 64,456                        | 35,883                       | 10,852,644                                 | 23  |
| 37,611                                 | 3,249,407                        | 495,688                       | 601,815                                      | Dr. 112,623                 | 19,180                        | 35,557                       | 8,723,622                                  | 24  |
| 654,407                                | 2,320,654                        | 130,331                       | —  | —                           | 56,344                        | 38,351                       | 3,663,025                                  | 25  |
| Dr. 616,796                            | 928,753 <sup>1</sup>             | 365,357                       | 601,815                                      | Dr. 112,623                 | Dr. 37,164                    | Dr. 2,794                    | 5,060,597                                  | 26  |
| —                                      | —                                | 208,905                       | —  | —                           | —                             | —                            | 1,561,000                                  | 27  |
| Dr. 616,796                            | 876,461                          | 156,452                       | 601,815                                      | Dr. 112,623                 | Dr. 37,164                    | Dr. 2,794                    | 3,499,597                                  | 28  |

<sup>1</sup> Operating licenses included with "All other operating expenses".





URBAN TRANSIT

TABLE 9. Persons Killed and Injured

|  | Persons killed  |              |                  |   |                  |              |
|--|-----------------|--------------|------------------|---|------------------|--------------|
|  | Employees       | Passengers   | Pedes-<br>trians | Persons<br>riding in<br>motor<br>vehicles | Other<br>persons | Total        |
|  | number          |              |                  |   |                  |              |
| <b>Cause of accident:</b>                  |                 |              |                  |   |                  |              |
| Collision.....                             | 1               | —            | 21               | 2   | —                | 24           |
| Boarding (excluding door accidents) .....  | —               | —            | ...              | ...                                       | —                | —            |
| Alighting (excluding door accidents) ..... | —               | —            | ...              | ...                                       | —                | —            |
| Caught/struck by doors .....               | —               | —            | ...              | ...                                       | —                | —            |
| Accidents on board .....                   | —               | —            | ...              | ...                                       | —                | —            |
| Other .....                                | —               | —            | 1                | —   | —                | 1            |
| <b>Total</b> .....                         | <b>1</b>        | <b>—</b>     | <b>22</b>        | <b>2</b>                                  | <b>—</b>         | <b>25</b>    |
| <b>Class of equipment involved:</b>        |                 |              |                  |   |                  |              |
| Electric car .....                         | —               | —            | 7                | —   | —                | 7            |
| Trolley coach .....                        | —               | —            | 3                | 1   | —                | 4            |
| Motor bus .....                            | —               | —            | 12               | 1   | —                | 13           |
| Other company equipment .....              | 1               | —            | —                | —   | —                | 1            |
| No vehicle .....                           | —               | —            | —                | —   | —                | —            |
| <b>Total</b> .....                         | <b>1</b>        | <b>—</b>     | <b>22</b>        | <b>2</b>                                  | <b>—</b>         | <b>25</b>    |
|  | Persons injured |              |                  |   |                  |              |
|  | Employees       | Passengers   | Pedes-<br>trians | Persons<br>riding in<br>motor<br>vehicles | Other<br>persons | Total        |
|  | number          |              |                  |   |                  |              |
| <b>Cause of accident:</b>                  |                 |              |                  |   |                  |              |
| Collision.....                             | 41              | 297          | 427              | 259                                       | 66               | 1,090        |
| Boarding (excluding door accidents) .....  | 8               | 321          | ...              | ...                                       | 4                | 333          |
| Alighting (excluding door accidents) ..... | 19              | 820          | ...              | ...                                       | —                | 839          |
| Caught/struck by doors .....               | 3               | 366          | ...              | ...                                       | —                | 369          |
| Accidents on board .....                   | 59              | 1,813        | ...              | ...                                       | —                | 1,872        |
| Other .....                                | 251             | 48           | 37               | —   | 11               | 347          |
| <b>Total</b> .....                         | <b>381</b>      | <b>3,665</b> | <b>464</b>       | <b>259</b>                                | <b>81</b>        | <b>4,850</b> |
| <b>Class of equipment involved:</b>        |                 |              |                  |   |                  |              |
| Electric car .....                         | 33              | 585          | 139              | 64  | 9                | 830          |
| Trolley coach .....                        | 53              | 624          | 51               | 55  | —                | 783          |
| Motor bus .....                            | 114             | 2,240        | 255              | 137                                       | 58               | 2,804        |
| Other company equipment .....              | 27              | 26           | —                | 3   | 12               | 68           |
| No vehicle .....                           | 154             | 190          | 19               | —   | 2                | 365          |
| <b>Total</b> .....                         | <b>381</b>      | <b>3,665</b> | <b>464</b>       | <b>259</b>                                | <b>81</b>        | <b>4,850</b> |

... Not applicable.

TABLE 10. Urban Transit Operations of Intercity and Rural Passenger Carriers<sup>1</sup>

|                                  | 1957           | 1958       |
|----------------------------------|----------------|------------|
| Passenger revenue .....          | \$ 1,335,398   | 1,416,242  |
| Revenue passengers carried ..... | No. 11,010,698 | 11,295,719 |
| Revenue vehicle miles run .....  | " 3,079,816    | 3,475,352  |

<sup>1</sup> Carriers whose main source of revenue is derived from intercity passenger operations. These data are not included in preceding tables.

SOURCE: D.B.S. 53-216- Annual,  
URBAN TRANSIT, 1958.



## DOMINION BUREAU OF STATISTICS

TABLE 14. Fares Charged by Major Urban Transit Systems

| No. |                            | St. John's<br>Transportation<br>Commission | Nova Scotia<br>Light and<br>Power<br>Halifax | City<br>Transit<br>Saint John | Quebec<br>Autobus Ltd.<br>Quebec City | Montreal<br>Transportation<br>Commission |
|-----|----------------------------|--|--|-------------------------------|---------------------------------------|--|
| 1   | Adults—Cash fare..... \$   | .15  | .15  | .15                           | .15                                   | .20                                      |
| 2   | Ticket fare..... \$        | 8/1.00                                     | 3/.40: 8/1.00                                | 8/1.00                        | 4/.50                                 | 2/.30                                    |
| 3   | Off-peak tickets..... \$   | —  | —  | —                             | 9/1.00: 20/2.00                       | —  |
| 4   | Zone fare..... \$          | —  | —  | —                             | —                                     | 4/.30                                    |
| 5   | Children—Cash fare..... \$ | .10  | .10  | .05                           | .05                                   | .07                                      |
| 6   | Ticket fare..... \$        | 4/.25                                      | 2/.15: 9/.50                                 | 6/.25                         | 5/.25                                 | 5/.30                                    |
| 7   | Off-peak tickets..... \$   | —  | —  | —                             | —                                     | —  |
| 8   | Zone fare..... \$          | —  | —  | —                             | —                                     | 6/.30                                    |
| 9   | Students—Cash fare..... \$ | .15  | —  | .05                           | .05                                   | —  |
| 10  | Ticket fare..... \$        | —  | —  | 6/.25                         | 5/.25                                 | —  |
| 11  | Off-peak tickets..... \$   | —  | —  | —                             | —                                     | —  |
| 12  | Zone fare..... \$          | —  | —  | —                             | —                                     | —  |

TABLE 15. Revenue Equipment of Major Urban Transit Systems

| No. |                                     | St. John's<br>Transportation<br>Commission | Nova Scotia<br>Light and<br>Power<br>Halifax | City<br>Transit<br>Saint John | Quebec<br>Autobus Ltd.<br>Quebec City | Montreal<br>Transportation<br>Commission |
|-----|-------------------------------------|--|--|-------------------------------|---------------------------------------|--|
| 1   | Electric cars..... No.              | —  | —  | —                             | —                                     | 120                                      |
| 2   | Trolley coaches..... "              | —  | 87   | —                             | —                                     | 105                                      |
| 3   | Motor buses—Gasoline..... "         | 12   | —  | —                             | 54                                    | 345                                      |
| 4   | Diesel oil..... "                   | 21   | —  | 44                            | 91                                    | 1,325                                    |
| 5   | Liquefied petro-<br>leum gas..... " | —  | —  | —                             | —                                     | —  |
| 6   | Subway cars..... "                  | —  | —  | —                             | —                                     | —  |

TABLE 16. Employees, Salaries and Wages of Major Urban Transit Systems

| No. |  | St. John's<br>Transportation<br>Commission | Nova Scotia<br>Light and<br>Power<br>Halifax | City<br>Transit<br>Saint John | Quebec<br>Autobus Ltd.<br>Quebec City | Montreal<br>Transportation<br>Commission |
|-----|--|--|--|-------------------------------|---------------------------------------|--|
| 1   | Salary rated employees <sup>1</sup> ..... No.                          | 5  | 64   | 13                            | 108                                   | 1,036                                    |
| 2   | Salaries..... \$   | 15,858                                     | 247,840                                      | 24,512                        | 465,286                               | 4,737,486                                |
| 3   | Conductors and passenger<br>equipment operators <sup>1</sup> ..... No. | 72   | 163  | 80                            | 284                                   | 2,649                                    |
| 4   | Wages..... \$  | 159,431                                    | 612,792                                      | 245,593                       | 987,921                               | 10,949,410                               |
| 5   | Other hourly rated employees <sup>1</sup> .. No.                       | 12   | 39   | 29                            | 68                                    | 1,275                                    |
| 6   | Wages..... \$  | 50,416                                     | 121,219                                      | 94,923                        | 236,152                               | 5,029,911                                |
| 7   | Total employees..... No.   | 89   | 266  | 122                           | 460                                   | 4,960                                    |
| 8   | Total salaries and wages..... \$                                       | 225,705                                    | 981,851                                      | 365,028                       | 1,689,359                             | 20,716,807                               |

<sup>1</sup> Monthly average.

TABLE 17. Fuel Consumption of Major Urban Transit Systems

| No. |                                | St. John's<br>Transportation<br>Commission | Nova Scotia<br>Light and<br>Power<br>Halifax | City<br>Transit<br>Saint John | Quebec<br>Autobus Ltd.<br>Quebec City | Montreal<br>Transportation<br>Commission |
|-----|--------------------------------|--|--|-------------------------------|---------------------------------------|--|
| 1   | Gasoline..... gal.             | 36,000                                     | —  | —                             | 412,552                               | 1,357,099                                |
| 2   | Diesel oil..... "              | 108,000                                    | —  | 366,872                       | 560,484                               | 6,316,824                                |
| 3   | Liquefied petroleum gas..... " | —  | —  | —                             | —                                     | —  |

SOURCE: D.B.S. 53-216, Annual,  
URBAN TRANSIT (1958)





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TABLE 1. Cargoes Loaded at Canadian Ports for Foreign Countries, by Country of Destination, Kind of Cargo, Registry of Vessel and Geographic Area

| Country of destination and kind of Cargo | Registry of Vessel | At Atlantic and Lower St. Lawrence Ports, Montreal and below | At Great Lakes and Upper St. Lawrence Ports above Montreal | At Pacific Ports | Total |
|--|--------------------|--|--|------------------|-------|
|  |                    | Cargo tons (2000 lb.)  |  |                  |       |
| ADEN                                     |                    |  |  |                  |       |
| GENERAL CARGO                            | UK                 | 21   |  |                  | 21    |
|  |                    | 21   |  |                  | 21    |
| AFRICA BRITISH EAST                      |                    |  |  |                  |       |
| GENERAL CARGO                            | NETH               |  |  | 5                | 5     |
|  | NORW               | 1701   |  |                  | 1701  |
| FLOUR GRAIN                              | NORW               | 266  |  |                  | 266   |
| LUMBER TIMBER BOX ETC                    | NETH               |  | 1148   |                  | 1148  |
| NEWSPRINT PAPER                          | NETH               |  | 299  |                  | 299   |
| PLYWOOD                                  | NETH               |  | 16   |                  | 16    |
| OTHER NON MET MIN PROD                   | NORW               | 218  |  |                  | 218   |
| ALL OTHER FREIGHT N O S                  | NETH               |  | 1  |                  | 1     |
|  |                    | 2185   |  | 1469             | 3654  |
| AFRICA BRITISH WEST                      |                    |  |  |                  |       |
| FLOUR GRAIN                              | UK                 | 507  |  |                  | 507   |
| EGGS CHEESE DAIRY PROD                   | UK                 | 28   |  |                  | 28    |
| NEWSPRINT PAPER                          | UK                 | 227  |  |                  | 227   |
| ALUMINUM                                 | UK                 | 40   |  |                  | 40    |
| OTHER NON FERROUS METAL                  | UK                 | 12   |  |                  | 12    |
| AGRICULTURAL IMPLEMENTS                  | UK                 | 1  |  |                  | 1     |
| AUTOS TRUCKS PARTS                       | UK                 | 6  |  |                  | 6     |
| ALL OTHER FREIGHT N O S                  | UK                 | 17   |  |                  | 17    |
|  |                    | 838  |  |                  | 838   |
| AFRICA FRENCH                            |                    |  |  |                  |       |
| GENERAL CARGO                            | GER                | 59   |  |                  | 59    |
|  | NETH               | 1  |  |                  | 1     |
|  | OTHER              | 19   |  |                  | 19    |
| ASBESTOS RAW                             | GER                | 1112   |  |                  | 1112  |
|  | OTHER              | 454  |  |                  | 454   |
| LUMBER TIMBER BOX ETC                    | ITALY              |  | 520  |                  | 520   |
|  | UK                 |  | 184  |                  | 184   |
| BEVERAGES                                | NETH               | 3  |  |                  | 3     |
| CANNED FOOD PRODUCTS                     | ITALY              |  | 1  |                  | 1     |
| ALL OTHER FREIGHT N O S                  | ITALY              |  | 1  |                  | 1     |
|  |                    | 1648   |  | 706              | 2354  |
| AFRICA FR EQUATORIAL                     |                    |  |  |                  |       |
| GENERAL CARGO                            | NETH               | 2  |  |                  | 2     |
| FLOUR GRAIN                              | UK                 | 575  |  |                  | 575   |
|  | USA                | 551  |  |                  | 551   |
| TOBACCO                                  | UK                 | 25   |  |                  | 25    |
|  |                    | 1153   |  |                  | 1153  |
| AFRICA PORTUGUESE                        |                    |  |  |                  |       |
| GENERAL CARGO                            | NETH               |  |  | 2                | 2     |
|  | NORW               | 1077   |  |                  | 1077  |
| WHEAT                                    | JAPAN              |  | 1688   |                  | 1688  |
|  | LIBER              |  | 448  |                  | 448   |
|  | NETH               |  | 7613   |                  | 7613  |
|  | NORW               | 1000   |  |                  | 1000  |
|  | OTHER              |  | 2251   |                  | 2251  |
| LOGS POSTS POLES ETC                     | NORW               | 351  |  |                  | 351   |
| LUMBER TIMBER BOX ETC                    | GREEK              |  | 1318   |                  | 1318  |
|  | JAPAN              |  | 7849   |                  | 7849  |
|  | LIBER              |  | 9174   |                  | 9174  |
|  | NETH               |  | 6952   |                  | 6952  |
|  | NORW               | 36   |  |                  | 36    |
|  | PANAM              |  | 1898   |                  | 1898  |
|  | UK                 |  | 8879   |                  | 8879  |
|  | OTHER              |  | 4775   |                  | 4775  |
| FISH FRESH FROZEN ETC                    | JAPAN              |  | 11   |                  | 11    |
|  | NETH               |  | 44   |                  | 44    |
| CANNED FOOD PRODUCTS                     | JAPAN              |  | 10   |                  | 10    |
|  | NETH               |  | 45   |                  | 45    |
|  | NORW               | 19   |  |                  | 19    |
| NEWSPRINT PAPER                          | NORW               | 14181  |  |                  | 14181 |
| PAPER OTHER                              | NETH               |  | 600  |                  | 600   |
| PLYWOOD                                  | JAPAN              |  | 1  |                  | 1     |
|  | NETH               |  | 31   |                  | 31    |
| CASTINGS AND MACHINERY                   | JAPAN              |  | 2  |                  | 2     |
|  | NETH               |  | 6  |                  | 6     |
| ALUMINUM                                 | NORW               | 665  |  |                  | 665   |
| ALL OTHER FREIGHT N O S                  | JAPAN              |  | 1  |                  | 1     |
|  | NORW               | 6  |  |                  | 6     |
|  |                    | 17335  |  | 53598            | 70933 |

1. See page 61

SOURCE: D.B.S. 54-202, Annual,

SHIPPING REPORT (1958) Part I, International Seaborne Shipping



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TABLE 5. Number and Registered Net Tonnage of, and Tons of Cargo Carried by, Vessels Arrived at and Departed from Canadian Ports in International Seaborne Shipping by Geographic Area and Registry of Vessel

| Country of Registry    |   | Atlantic and Lower St. Lawrence Ports, Montreal and below |                     |                        | Great Lakes and Upper St. Lawrence Ports above Montreal |                     |                        | Pacific Ports |                     |                        | Total  |                     |                        |
|------------------------|---|---|---------------------|------------------------|---|---------------------|------------------------|---------------|---------------------|------------------------|--------|---------------------|------------------------|
|                        |   | Number  | Registered net tons | Cargo tons (2,000 lb.) | Number  | Registered net tons | Cargo tons (2,000 lb.) | Number        | Registered net tons | Cargo tons (2,000 lb.) | Number | Registered net tons | Cargo tons (2,000 lb.) |
| AFRICA SOUTH           | A | 1   | 5966                | 10100                  |   |                     |                        | 1             | 4587                |                        | 2      | 10553               | 10100                  |
|                        | D | 1   | 5966                | 10500                  |   |                     |                        | 1             | 4587                | 11637                  | 2      | 10553               | 22137                  |
| ALASKA                 | A |   |                     |                        |   |                     |                        | 1             | 22                  |                        | 1      | 22                  |                        |
|                        | D |   |                     |                        |   |                     |                        | 1             | 22                  |                        | 1      | 22                  |                        |
| AUSTRALIA              | A | 1   | 3186                | 628                    |   |                     |                        |               |                     |                        | 1      | 3186                | 628                    |
|                        | D | 1   | 3186                | 8966                   |   |                     |                        |               |                     |                        | 1      | 3186                | 8966                   |
| BARBADOS               | A | 9   | 3996                |                        |   |                     |                        |               |                     |                        | 9      | 3996                |                        |
|                        | D | 8   | 3552                |                        |   |                     |                        |               |                     |                        | 8      | 3552                |                        |
| BELGIUM AND LUXEMBOURG | A | 11  | 48691               | 322                    |   |                     |                        |               |                     |                        | 11     | 48691               | 322                    |
|                        | D | 11  | 48691               | 2736                   |   |                     |                        |               |                     |                        | 11     | 48691               | 2736                   |
| BERMUDA                | A | 60  | 344405              |                        |   |                     |                        | 1             | 110                 |                        | 61     | 344515              |                        |
|                        | D | 60  | 344405              | 35444                  |   |                     |                        | 1             | 110                 |                        | 61     | 344515              | 35444                  |
| BOLIVIA                | A |   |                     |                        | 1   | 650                 |                        |               |                     |                        | 1      | 650                 |                        |
|                        | D |   |                     |                        | 1   | 650                 | 1923                   |               |                     |                        | 1      | 650                 | 1923                   |
| CANADA                 | A | 6070  | 1945837             | 1181949                | 3310  | 8717771             | 12577278               | 3829          | 2686235             | 210668                 | 13209  | 13349843            | 13969895               |
|                        | D | 7272  | 3071808             | 2241122                | 3118  | 8866088             | 3980416                | 3808          | 2642568             | 1132889                | 14198  | 14580158            | 7354427                |
| CHILE                  | A |   |                     |                        |   |                     |                        | 10            | 21802               | 1484                   | 10     | 21802               | 1484                   |
|                        | D |   |                     |                        |   |                     |                        | 10            | 21802               | 4310                   | 10     | 21802               | 4310                   |
| CHINA                  | A | 3   | 6141                | 4900                   |   |                     |                        | 3             | 10992               |                        | 6      | 17133               | 4900                   |
|                        | D | 3   | 6141                | 2034                   |   |                     |                        | 3             | 10992               | 2950                   | 6      | 17133               | 4984                   |
| COLOMBIA               | A | 12  | 19718               | 58                     |   |                     |                        | 18            | 39968               | 2552                   | 30     | 59686               | 2610                   |
|                        | D | 11  | 18707               | 9631                   |   |                     |                        | 19            | 42091               | 12372                  | 30     | 60798               | 22003                  |
| COSTA RICA             | A | 2   | 6321                |                        |   |                     |                        | 11            | 49017               |                        | 13     | 55838               |                        |
|                        | D | 2   | 6321                | 5568                   |   |                     |                        | 11            | 49017               | 32463                  | 13     | 55838               | 38031                  |
| CUBA                   | A | 15  | 22496               | 28764                  |   |                     |                        |               |                     |                        | 15     | 22496               | 28764                  |
|                        | D | 15  | 22496               | 1795                   |   |                     |                        |               |                     |                        | 15     | 22496               | 1795                   |
| DENMARK                | A | 329   | 435425              | 143743                 | 31  | 19933               | 14858                  | 58            | 164735              | 9125                   | 418    | 620093              | 167726                 |
|                        | D | 331   | 434036              | 133099                 | 31  | 19933               | 13819                  | 59            | 167317              | 107099                 | 421    | 621286              | 254017                 |
| ECUADOR                | A | 12  | 25381               | 3585                   |   |                     |                        | 12            | 27230               | 1426                   | 24     | 52611               | 5011                   |
|                        | D | 12  | 25381               | 5296                   |   |                     |                        | 12            | 27230               | 4849                   | 24     | 52611               | 10145                  |
| EGYPT                  | A | 17  | 58652               | 14363                  |   |                     |                        |               |                     |                        | 17     | 58652               | 14363                  |
|                        | D | 17  | 58652               | 19552                  |   |                     |                        |               |                     |                        | 17     | 58652               | 19552                  |
| EIRE                   | A | 68  | 145103              | 9452                   | 3   | 1647                |                        | 9             | 41286               |                        | 80     | 188036              | 9452                   |
|                        | D | 68  | 145103              | 158465                 | 3   | 1647                | 569                    | 9             | 41286               | 11836                  | 80     | 188036              | 170870                 |
| FIJI                   | A |   |                     |                        |   |                     |                        | 16            | 44103               | 18441                  | 16     | 44103               | 18441                  |
|                        | D |   |                     |                        |   |                     |                        | 15            | 43365               | 23365                  | 15     | 43365               | 23365                  |
| FINLAND                | A | 43  | 66663               | 40394                  | 9   | 6590                | 934                    | 32            | 57273               | 11189                  | 84     | 130526              | 52517                  |
|                        | D | 42  | 63943               | 84165                  | 9   | 6590                | 326                    | 33            | 59559               | 48293                  | 84     | 130092              | 132784                 |
| FORMOSA                | A | 5   | 10881               |                        |   |                     |                        | 17            | 73202               | 101                    | 22     | 84083               | 101                    |
|                        | D | 5   | 10881               | 22295                  |   |                     |                        | 17            | 73202               | 47305                  | 22     | 84083               | 69600                  |
| FRANCE                 | A | 149   | 210927              | 15393                  | 29  | 31057               | 2178                   | 26            | 112842              | 3464                   | 204    | 354826              | 21035                  |
|                        | D | 150   | 214152              | 161180                 | 29  | 31057               | 2108                   | 26            | 112842              | 43000                  | 205    | 358051              | 206288                 |
| GERMANY                | A | 1180  | 2234151             | 413150                 | 671   | 580798              | 92954                  | 142           | 414088              | 48269                  | 1993   | 3229037             | 554373                 |
|                        | D | 1176  | 2229935             | 2194957                | 670   | 579595              | 108714                 | 142           | 414445              | 279070                 | 1988   | 3223975             | 2582741                |
| GREECE                 | A | 55  | 421283              | 62233                  |   |                     |                        | 103           | 473762              | 11157                  | 158    | 895045              | 73390                  |
|                        | D | 55  | 421283              | 182403                 |   |                     |                        | 103           | 472957              | 438830                 | 158    | 894240              | 621233                 |
| HONDURAS               | A | 13  | 3296                | 1648                   |   |                     |                        | 16            | 71823               |                        | 29     | 75119               | 1648                   |
|                        | D | 13  | 3296                | 1262                   |   |                     |                        | 16            | 71823               | 33762                  | 29     | 75119               | 35024                  |
| HONDURAS BRITISH       | A |   |                     |                        |   |                     |                        | 2             | 8821                |                        | 2      | 8821                |                        |
|                        | D |   |                     |                        |   |                     |                        | 2             | 8821                | 2290                   | 2      | 8821                | 2290                   |
| HONG KONG              | A | 3   | 8973                | 520                    |   |                     |                        | 16            | 59149               | 307                    | 19     | 68122               | 827                    |
|                        | D | 3   | 8973                |                        |   |                     |                        | 16            | 59149               | 46066                  | 19     | 68122               | 46066                  |
| ICELAND                | A | 1   | 245                 |                        |   |                     |                        |               |                     |                        | 1      | 245                 |                        |
|                        | D | 1   | 245                 |                        |   |                     |                        |               |                     |                        | 1      | 245                 |                        |
| ISRAEL                 | A | 5   | 24982               | 2448                   |   |                     |                        |               |                     |                        | 5      | 24982               | 2448                   |
|                        | D | 5   | 24982               | 1279                   |   |                     |                        |               |                     |                        | 5      | 24982               | 1279                   |
| ITALY                  | A | 177   | 759368              | 430162                 | 10  | 11980               | 1798                   | 98            | 434106              | 14460                  | 285    | 1205454             | 446420                 |
|                        | D | 177   | 756912              | 651251                 | 10  | 11980               | 684                    | 98            | 435454              | 272311                 | 285    | 1204346             | 924246                 |
| JAPAN                  | A | 2   | 9130                | 12045                  |   |                     |                        | 443           | 2041428             | 76288                  | 445    | 2050558             | 88333                  |
|                        | D | 2   | 9130                |                        |   |                     |                        | 444           | 2045819             | 1753804                | 446    | 2054949             | 1753804                |

SOURCE: D.B.S. 54-202 Annual, SHIPPING REPORT (1958) Part I, International Seaborne Shipping





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TABLE 11. Cargoes Loaded and Unloaded at Canadian Ports in Coastwise Shipping by Port and Commodity

| Port and Commodity      | Cargoes Loaded         | Cargoes Unloaded | Total    |
|-------------------------|------------------------|------------------|----------|
|                         | Cargo tons (2000 lbs.) |                  |          |
| ALL OTHER B C PORTS     |                        |                  |          |
| GENERAL CARGO           | 34                     | 111              | 145      |
| SULPHUR                 |                        | 28               | 28       |
| SAND GRAVEL CR STONE    | 4006                   | 4910             | 8916     |
| LOGS POSTS POLES ETC    | 450542                 | 21060            | 471602   |
| PULPWOOD AND CHIPS      | 520                    | 1125             | 1645     |
| LUMBER TIMBER BOX ETC   |                        | 60               | 60       |
| FISH OILS               | 300                    |                  | 300      |
| IRON AND STEEL BAR ETC  |                        | 25               | 25       |
| CASTINGS AND MACHINERY  | 25                     | 139              | 184      |
| CEMENT                  | 900                    |                  | 900      |
| GASOLINE                |                        | 866              | 866      |
| PETROLEUM OILS AND PROD | 520                    | 8044             | 8564     |
| CHEMICALS AND CHEM PR   | 148                    | 132              | 280      |
| CONTAINERS WOOD METAL   | 84                     |                  | 84       |
| ALL OTHER FREIGHT N O S | 242                    | 376              | 618      |
|                         | 457321                 | 36896            | 494217   |
| B C PORTS TOTAL         | 7040993                | 6836535          | 13877528 |
| NORTHWEST TERRITORIES   |                        |                  |          |
| FROBISHER BAY           |                        |                  |          |
| GENERAL CARGO           | 381                    | 11264            | 11645    |
| CASTINGS AND MACHINERY  | 16                     |                  | 16       |
| GASOLINE                |                        | 9749             | 9749     |
| PETROLEUM OILS AND PROD |                        | 2547             | 2547     |
| CONTAINERS WOOD METAL   | 24                     |                  | 24       |
| ALL OTHER FREIGHT N O S |                        | 3342             | 3342     |
|                         | 421                    | 26902            | 27323    |
| ALL OTHER N W T PORTS   |                        |                  |          |
| GENERAL CARGO           | 6                      | 355              | 361      |
| PETROLEUM OILS AND PROD |                        | 2310             | 2310     |
| CONTAINERS WOOD METAL   | 23                     |                  | 23       |
| ALL OTHER FREIGHT N O S | 32                     |                  | 32       |
|                         | 61                     | 2665             | 2726     |
| N W T PORTS TOTAL       | 482                    | 29567            | 30049    |

TABLE 11 SUMMARY

| PROVINCE              | Cargoes Loaded         | Cargoes Unloaded | Total    |
|-----------------------|------------------------|------------------|----------|
|                       | Cargo tons (2000 lbs.) |                  |          |
| NEWFOUNDLAND          | 1491314                | 1689157          | 3180471  |
| PRINCE EDWARD ISL     | 70784                  | 119027           | 189811   |
| NOVA SCOTIA           | 4088446                | 1369245          | 5457691  |
| NEW BRUNSWICK         | 175579                 | 802807           | 978386   |
| QUEBEC                | 8809195                | 13747818         | 22557013 |
| ONTARIO               | 16686293               | 14163040         | 30849333 |
| MANITOBA              | 6455                   | 21708            | 28163    |
| BRITISH COLUMBIA      | 7040993                | 6836535          | 13877528 |
| NORTHWEST TERRITORIES | 482                    | 29567            | 30049    |
| GRAND TOTAL           | 38369541               | 38778904         | 77148445 |

SOURCE: D.B.S. 54-204, Annual,

SHIPPING REPORT (1958) Part III, Coastwise Shipping.





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TABLE 17. Tonnage of Cargo Unloaded at Canadian Ports in Inter and Intra-Provincial Trade by Province

| Province of unloading                               | Province of loading    |                            |                |                  |           |            |          |  |            |
|---|------------------------|----------------------------|----------------|------------------|-----------|------------|----------|--|------------|
|   | New-<br>foundland      | Prince<br>Edward<br>Island | Nova<br>Scotia | New<br>Brunswick | Quebec    | Ontario    | Manitoba | British<br>Columbia<br>and<br>Northwest<br>Territories | Total      |
|   | cargo tons (2,000 lb.) |                            |                |                  |           |            |          |  |            |
| Newfoundland .....                                  | 640,504                | 26,795                     | 857,431        | 29,530           | 111,523   | 23,363     | 11       | —  | 1,689,157  |
| Prince Edward Island .....                          | 67                     | —                          | 115,838        | —                | 1,368     | 1,754      | —        | —  | 119,027    |
| Nova Scotia .....                                   | 671,371                | 8,721                      | 261,473        | 59,489           | 367,509   | 600        | —        | 82   | 1,369,245  |
| New Brunswick .....                                 | 965                    | 13,676                     | 368,148        | 74,791           | 285,997   | 1,624      | —        | 57,606   | 802,807    |
| Quebec .....  | 156,107                | 18,660                     | 2,302,501      | 61,354           | 6,417,992 | 4,778,883  | 2,375    | 11,946   | 13,747,818 |
| Ontario .....                                       | 5,384                  | —                          | —              | —                | 1,923,145 | 12,234,355 | —        | 156  | 14,163,040 |
| Manitoba .....                                      | —                      | —                          | —              | —                | 535       | 16         | —        | 21,157   | 21,708     |
| British Columbia and Northwest<br>Territories ..... | 10,373                 | —                          | 4,857          | —                | 57,129    | —          | 355      | 6,793,388  | 6,866,102  |
| Total .....   | 1,484,771              | 65,852                     | 3,910,248      | 225,164          | 9,165,198 | 17,040,595 | 2,741    | 6,884,335  | 38,778,904 |

TABLE 18. Cargo Loaded and Unloaded in Coastwise Shipping by Vessels of Foreign Registry, with Number of Vessels and Registered Net Tonnage

| Country of registry       | Atlantic and Lower St. Lawrence River ports |                        |                  | Great Lakes ports   |                        |               | Pacific ports       |                        |               | Total               |                        |                  |
|---------------------------|---|------------------------|------------------|---------------------|------------------------|---------------|---------------------|------------------------|---------------|---------------------|------------------------|------------------|
|                           | Number <sup>1</sup>                         | Registered net tonnage | Cargo tons       | Number <sup>1</sup> | Registered net tonnage | Cargo tons    | Number <sup>1</sup> | Registered net tonnage | Cargo tons    | Number <sup>1</sup> | Registered net tonnage | Cargo tons       |
| Loaded                    |   |                        |                  |                     |                        |               |                     |                        |               |                     |                        |                  |
| United Kingdom .....      | 688   | 2,275,559              | 4,140,773        | 66                  | 40,162                 | 29,935        | 27                  | 84,510                 | 38,127        | 781                 | 2,400,231              | 4,208,835        |
| British West Indies ..... | 121   | 249,100                | 532,604          | —                   | —                      | —             | —                   | —                      | —             | 121                 | 249,100                | 532,604          |
| Germany .....             | 2   | 1,210                  | 1,821            | —                   | —                      | —             | —                   | —                      | —             | 2                   | 1,210                  | 1,821            |
| Hong Kong .....           | 1   | 2,991                  | 5,220            | —                   | —                      | —             | 4                   | 11,964                 | 6,685         | 5                   | 14,955                 | 11,905           |
| Netherlands .....         | —   | —                      | —                | —                   | —                      | —             | 2                   | 9,012                  | 785           | 2                   | 9,012                  | 785              |
| Norway .....              | 5   | 7,542                  | 13,567           | —                   | —                      | —             | —                   | —                      | —             | 5                   | 7,542                  | 13,567           |
| Portugal .....            | 2   | 778                    | 361              | —                   | —                      | —             | —                   | —                      | —             | 2                   | 778                    | 361              |
| Sweden .....              | 1   | 222                    | 200              | —                   | —                      | —             | —                   | —                      | —             | 1                   | 222                    | 200              |
| <b>Grand total .....</b>  | <b>820</b>                                  | <b>2,537,402</b>       | <b>4,694,546</b> | <b>66</b>           | <b>40,162</b>          | <b>29,935</b> | <b>33</b>           | <b>105,486</b>         | <b>45,597</b> | <b>919</b>          | <b>2,683,050</b>       | <b>4,770,078</b> |
| Unloaded                  |   |                        |                  |                     |                        |               |                     |                        |               |                     |                        |                  |
| United Kingdom .....      | 660   | 1,969,314              | 4,092,823        | 50                  | 32,327                 | 30,970        | 34                  | 84,403                 | 71,251        | 744                 | 2,086,044              | 4,195,044        |
| British West Indies ..... | 169   | 332,595                | 649,937          | —                   | —                      | —             | —                   | —                      | —             | 169                 | 332,595                | 649,937          |
| Germany .....             | 1   | 546                    | 674              | 1                   | 774                    | 688           | —                   | —                      | —             | 2                   | 1,320                  | 1,362            |
| Hong Kong .....           | —   | —                      | —                | —                   | —                      | —             | 4                   | 11,964                 | 5,677         | 4                   | 11,964                 | 5,677            |
| Netherlands .....         | —   | —                      | —                | —                   | —                      | —             | 2                   | 9,012                  | 785           | 2                   | 9,012                  | 785              |
| Norway .....              | 7   | 8,155                  | 13,160           | —                   | —                      | —             | —                   | —                      | —             | 7                   | 8,155                  | 13,160           |
| Portugal .....            | 2   | 778                    | 361              | —                   | —                      | —             | —                   | —                      | —             | 2                   | 778                    | 361              |
| Sweden .....              | 1   | 222                    | 200              | —                   | —                      | —             | —                   | —                      | —             | 1                   | 222                    | 200              |
| <b>Grand total .....</b>  | <b>840</b>                                  | <b>2,311,610</b>       | <b>4,757,155</b> | <b>51</b>           | <b>33,101</b>          | <b>31,658</b> | <b>40</b>           | <b>105,379</b>         | <b>77,713</b> | <b>931</b>          | <b>2,450,090</b>       | <b>4,866,526</b> |

<sup>1</sup> Excludes vessels in ballast.

SOURCE: D.B.S. 54-204, Annual,  
SHIPPING REPORT (1958) Part III, Coastwise Shipping.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The text also mentions the need for regular audits and the role of internal controls in ensuring the reliability of the data.

2. The second part of the document focuses on the challenges faced by organizations in implementing effective risk management strategies. It highlights the complexity of identifying and assessing risks, particularly in a rapidly changing environment. The text suggests that organizations should adopt a proactive approach to risk management, involving all levels of the organization and utilizing a variety of tools and techniques.

3. The third part of the document addresses the issue of data security and privacy. It discusses the increasing threat of cyberattacks and the need for robust security measures to protect sensitive information. The text also touches on the importance of data governance and the role of policies and procedures in ensuring the proper use and protection of data.

4. The fourth part of the document explores the impact of technology on the financial industry. It discusses the rise of digital banking and the use of artificial intelligence and machine learning in financial analysis and decision-making. The text also mentions the challenges of integrating new technologies with existing systems and the need for ongoing training and development for staff.

5. The fifth part of the document discusses the importance of transparency and accountability in financial reporting. It emphasizes the need for clear and concise communication of financial information to stakeholders and the role of external audits in providing assurance on the accuracy of the reports. The text also mentions the importance of ethical considerations in financial reporting and the need for organizations to adhere to high standards of conduct.

6. The sixth part of the document discusses the role of the financial system in supporting economic growth and development. It highlights the importance of providing access to financial services for all segments of the population and the need for financial inclusion initiatives. The text also mentions the role of the financial system in managing the country's foreign exchange reserves and the importance of maintaining a stable and sound financial system.

7. The seventh part of the document discusses the challenges of financial reform and the need for a comprehensive approach to addressing the issues facing the financial system. It emphasizes the importance of strengthening the legal and regulatory framework and the need for effective implementation and monitoring of reforms. The text also mentions the importance of public participation in the reform process and the need for a clear and consistent policy direction.

DOMINION BUREAU OF STATISTICS

TABLE 7. Vessels Owned or Chartered in Operation during and at End of Season, by Canadian Marine Operators, by Type of Operator, by Division, 1958

|                                      | Passenger          |                  |                  |               |  | Passenger and freight |    |                  |    |  | Freight            |       |                  |     |  |
|--------------------------------------|--------------------|------------------|------------------|---------------|--|-----------------------|----|------------------|----|--|--------------------|-------|------------------|-----|--|
|                                      | Total in operation |                  |                  |               | Owned vessels not operated during season | Total in operation    |    |                  |    | Owned vessels not operated during season | Total in operation |       |                  |     | Owned vessels not operated during season |
|                                      | during season      |                  | at end of season |               |  | during season         |    | at end of season |    |  | during season      |       | at end of season |     |  |
|                                      | O <sup>1</sup>     | C <sup>2</sup>   | O                | C             |  | O                     | C  | O                | C  |  | O                  | C     | O                | C   |  |
| Incorporated companies               |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 9                  | —                | 9                | —             | —  | 45                    | 48 | 38               | 48 | —  | 138                | 115   | 135              | 62  | 17                                       |
| Pacific division .....               | 12                 | —                | 12               | —             | 4  | 35                    | 5  | 32               | 1  | 2  | 14                 | 59    | 11               | 13  | 1  |
| Great Lakes division .....           | 11                 | —                | 9                | —             | —  | 13                    | —  | 13               | —  | —  | 157                | 3     | 153              | 3   | 10                                       |
| Inland division .....                | 3                  | —                | 3                | —             | 1  | 19                    | —  | 18               | —  | 1  | 3                  | —     | 3                | —   | 1  |
| Total .....                          | 35                 | —                | 33               | —             | 5  | 112                   | 53 | 101              | 49 | 3  | 312                | 177   | 302              | 78  | 29                                       |
| Individual ownership and partnership |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 10                 | —                | 10               | —             | —  | 41                    | —  | 38               | —  | 1  | 48                 | —     | 47               | —   | 3  |
| Pacific division .....               | 1                  | —                | 1                | —             | —  | —                     | —  | —                | —  | —  | —                  | —     | —                | —   | —  |
| Great Lakes division .....           | 1                  | —                | 1                | —             | 1  | —                     | —  | —                | —  | —  | —                  | —     | —                | —   | —  |
| Inland division .....                | 3                  | —                | 3                | —             | —  | 4                     | —  | 4                | —  | —  | —                  | —     | —                | —   | —  |
| Total .....                          | 15                 | —                | 15               | —             | 1  | 45                    | —  | 42               | —  | 1  | 48                 | —     | 47               | —   | 3  |
| Total vessels                        |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 19                 | —                | 19               | —             | —  | 86                    | 48 | 76               | 48 | 1  | 186                | 115   | 182              | 62  | 20                                       |
| Pacific division .....               | 13                 | —                | 13               | —             | 4  | 35                    | 5  | 32               | 1  | 2  | 14                 | 59    | 11               | 13  | 1  |
| Great Lakes division .....           | 12                 | —                | 10               | —             | 1  | 13                    | —  | 13               | —  | —  | 157                | 3     | 153              | 3   | 10                                       |
| Inland division .....                | 6                  | —                | 6                | —             | 1  | 23                    | —  | 22               | —  | 1  | 3                  | —     | 3                | —   | 1  |
| Total .....                          | 50                 | —                | 48               | —             | 6  | 157                   | 53 | 143              | 49 | 4  | 360                | 177   | 349              | 78  | 32                                       |
| Tanker                               |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Tugs                                 |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Tow barges and scows                 |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Total in operation                   |                    |                  |                  |               | Owned vessels not operated during season | Total in operation    |    |                  |    | Owned vessels not operated during season | Total in operation |       |                  |     | Owned vessels not operated during season |
| during season                        |                    | at end of season |                  | during season |  | at end of season      |    | during season    |    |  | at end of season   |       |                  |     |  |
| O                                    | C                  | O                | C                | O             |  | C                     | O  | C                | O  |  | C                  | O     | C                |     |  |
| Incorporated companies               |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 36                 | 12               | 33               | 5             | 1  | 31                    | —  | 30               | —  | 2  | 47                 | 1     | 47               | 1   | 11                                       |
| Pacific division .....               | 9                  | —                | 8                | —             | 1  | 262                   | 40 | 254              | 35 | 31                                       | 362                | 157   | 359              | 145 | —  |
| Great Lakes division .....           | 14                 | 16               | 13               | 3             | —  | 9                     | 2  | 9                | —  | —  | 14                 | —     | 13               | —   | 1  |
| Inland division .....                | —                  | —                | —                | —             | —  | 40                    | 1  | 40               | 1  | 11                                       | 147                | 1     | 147              | 1   | 6  |
| Total .....                          | 59                 | 28               | 54               | 8             | 2  | 342                   | 43 | 333              | 36 | 44                                       | 570                | 159   | 566              | 147 | 18                                       |
| Individual ownership and partnership |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 1                  | —                | 1                | —             | —  | 3                     | —  | 3                | —  | 1  | 12                 | —     | 12               | —   | —  |
| Pacific division .....               | 1                  | —                | 1                | —             | —  | 10                    | —  | 9                | —  | 2  | —                  | —     | —                | —   | —  |
| Great Lakes division .....           | —                  | —                | —                | —             | —  | 1                     | —  | 1                | —  | —  | —                  | —     | —                | —   | —  |
| Inland division .....                | —                  | —                | —                | —             | —  | 6                     | —  | 6                | —  | —  | 6                  | —     | 6                | —   | —  |
| Total .....                          | 2                  | —                | 2                | —             | —  | 20                    | —  | 19               | —  | 3  | 18                 | —     | 18               | —   | —  |
| Total vessels                        |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 37                 | 12               | 34               | 5             | 1  | 34                    | —  | 33               | —  | 3  | 59                 | 1     | 59               | 1   | 11                                       |
| Pacific division .....               | 10                 | —                | 9                | —             | 1  | 272                   | 40 | 263              | 35 | 33                                       | 362                | 157   | 359              | 145 | —  |
| Great Lakes division .....           | 14                 | 16               | 13               | 3             | —  | 10                    | 2  | 10               | —  | —  | 14                 | —     | 13               | —   | 1  |
| Inland division .....                | —                  | —                | —                | —             | —  | 46                    | 1  | 46               | 1  | 11                                       | 153                | 1     | 153              | 1   | 6  |
| Total .....                          | 61                 | 28               | 56               | 8             | 2  | 362                   | 43 | 352              | 36 | 47                                       | 588                | 159   | 584              | 147 | 18                                       |
| Miscellaneous vessels                |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Total all vessels                    |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Total in operation                   |                    |                  |                  |               | Owned vessels not operated during season | Total in operation    |    |                  |    | Owned vessels not operated during season |                    |       |                  |     |  |
| during season                        |                    | at end of season |                  | during season |  | at end of season      |    |                  |    |  |                    |       |                  |     |  |
| O                                    | C                  | O                | C                | O             |  | C                     | O  | C                |    |  |                    |       |                  |     |  |
| Incorporated companies               |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 9                  | —                | 7                | —             | —  | —                     | —  | —                | —  | 315                                      | 176                | 299   | 116              | —   | 31                                       |
| Pacific division .....               | 8                  | 2                | 9                | 1             | —  | —                     | —  | —                | —  | 702                                      | 263                | 685   | 195              | —   | 39                                       |
| Great Lakes division .....           | 12                 | —                | 12               | —             | —  | —                     | —  | —                | —  | 230                                      | 21                 | 222   | 6                | —   | 11                                       |
| Inland division .....                | 21                 | —                | 21               | —             | —  | —                     | —  | 4                | —  | 233                                      | 2                  | 232   | 2                | —   | 24                                       |
| Total .....                          | 50                 | 2                | 49               | 1             | —  | —                     | —  | 4                | —  | 1,480                                    | 462                | 1,438 | 319              | —   | 105                                      |
| Individual ownership and partnership |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 12                 | —                | 12               | —             | —  | —                     | —  | —                | —  | 127                                      | —                  | 123   | —                | —   | 5  |
| Pacific division .....               | —                  | —                | —                | —             | —  | —                     | —  | —                | —  | 12                                       | —                  | 11    | —                | —   | 2  |
| Great Lakes division .....           | —                  | —                | —                | —             | —  | —                     | —  | —                | —  | 2  | —                  | 2     | —                | —   | 1  |
| Inland division .....                | —                  | —                | —                | —             | —  | —                     | —  | —                | —  | 19                                       | —                  | 19    | —                | —   | —  |
| Total .....                          | 12                 | —                | 12               | —             | —  | —                     | —  | —                | —  | 160                                      | —                  | 155   | —                | —   | 8  |
| Total vessels                        |                    |                  |                  |               |  |                       |    |                  |    |  |                    |       |                  |     |  |
| Atlantic division .....              | 21                 | —                | 19               | —             | —  | —                     | —  | —                | —  | 442                                      | 176                | 422   | 116              | —   | 36                                       |
| Pacific division .....               | 8                  | 2                | 9                | 1             | —  | —                     | —  | —                | —  | 714                                      | 263                | 696   | 195              | —   | 41                                       |
| Great Lakes division .....           | 12                 | —                | 12               | —             | —  | —                     | —  | —                | —  | 232                                      | 21                 | 224   | 6                | —   | 12                                       |
| Inland division .....                | 21                 | —                | 21               | —             | —  | —                     | —  | 4                | —  | 252                                      | 2                  | 251   | 2                | —   | 24                                       |
| Total .....                          | 62                 | 2                | 61               | 1             | —  | —                     | —  | 4                | —  | 1,640                                    | 462                | 1,593 | 319              | —   | 113                                      |

<sup>1</sup>O — Owned.  
<sup>2</sup>C — Chartered.

SOURCE: D.B.S. 54-205- Annual  
AFTER THE SEASON (1958)







DOMINION BUREAU OF STATISTICS

TABLE 6 D. Number of Tons of Cargo Carried Down St. Lawrence Canals to Outside Points, by Country of Registry of Vessel

| Country of registry of vessel             | Ports or countries at which cargo unloaded |   |  |                                 |                 |                   |                     |         |
|---|--|---|--|---------------------------------|-----------------|-------------------|---------------------|---------|
|   | Canadian Atlantic Coast ports              | United States Atlantic Coast and Gulf of Mexico ports | United Kingdom and Northern Ireland      | British West Indies and Bermuda | Belgium         | Denmark           | Finland             |         |
| Canada .....                              | 12,408                                     | —   | —  | 130                             | —               | —                 | —                   |         |
| United Kingdom and Northern Ireland ..... | 20,925                                     | 650   | 35,055                                   | —                               | 1,182           | —                 | —                   |         |
| British West Indies and Bermuda .....     | —  | —   | —  | —                               | —               | —                 | —                   |         |
| Denmark .....                             | —  | —   | 16,366                                   | 1,046                           | 1,240           | —                 | —                   |         |
| Finland .....                             | —  | —   | 707                                      | —                               | —               | 1,260             | 1,908               |         |
| France .....                              | —  | —   | —  | —                               | 253             | —                 | —                   |         |
| Germany .....                             | —  | —   | 61,823                                   | 3,714                           | 22,472          | 80                | —                   |         |
| Italy .....                               | —  | —   | —  | —                               | —               | —                 | —                   |         |
| Netherlands .....                         | —  | —   | 11,775                                   | —                               | 665             | —                 | —                   |         |
| Norway .....                              | —  | —   | 48,971                                   | 2,189                           | 2,980           | 6,538             | —                   |         |
| Sweden .....                              | —  | —   | 13,940                                   | —                               | 3,618           | 32                | —                   |         |
| Panama .....                              | —  | —   | —  | —                               | —               | —                 | —                   |         |
| African Countries .....                   | —  | —   | 1,269                                    | 1,015                           | —               | —                 | —                   |         |
| Total .....                               | 33,333                                     | 650   | 189,906                                  | 8,094                           | 32,410          | 7,910             | 1,908               |         |
|   | France                                     | Germany   | Greece                                   | Italy                           | Nether-lands    | Norway            | Portugal            | Sweden  |
| Canada .....                              | —  | —   | —  | —                               | —               | —                 | —                   | —       |
| United Kingdom and Northern Ireland ..... | —  | —   | —  | —                               | —               | —                 | —                   | —       |
| British West Indies and Bermuda .....     | —  | —   | 657                                      | —                               | —               | —                 | —                   | —       |
| Denmark .....                             | 1,456                                      | 1,391   | —  | 666                             | 5,089           | —                 | —                   | —       |
| Finland .....                             | —  | —   | —  | —                               | —               | —                 | —                   | 1,788   |
| France .....                              | 8,418                                      | —   | 1,230                                    | 1,473                           | 419             | —                 | 560                 | —       |
| Germany .....                             | 19,989                                     | 35,531  | 1,270                                    | 11,029                          | 16,442          | 4,720             | 7,233               | 1,000   |
| Italy .....                               | —  | —   | —  | —                               | —               | —                 | 1,300               | —       |
| Netherlands .....                         | 15,318                                     | 1,041   | 700                                      | 1,170                           | 14,624          | —                 | 1,210               | —       |
| Norway .....                              | 10,328                                     | 1,809   | 872                                      | 9,355                           | 11,649          | 14,260            | 2,778               | 1,122   |
| Sweden .....                              | 14,984                                     | 48  | —  | 1,016                           | 5,458           | 1,921             | —                   | 6,315   |
| Panama .....                              | —  | —   | —  | —                               | —               | —                 | —                   | —       |
| African Countries .....                   | —  | —   | —  | —                               | —               | —                 | —                   | —       |
| Total .....                               | 70,493                                     | 39,820  | 4,729                                    | 24,709                          | 53,681          | 20,901            | 13,081              | 10,225  |
|   | Other European Countries                   | Panama  | Central American and Caribbean Countries | South American Countries        | Asian Countries | African Countries | Total tons of cargo |         |
|   |  |   |  |                                 |                 |                   | 1958                | 1957    |
| Canada .....                              | —  | —   | —  | 1,200                           | —               | —                 | 13,738              | 35,551  |
| United Kingdom and Northern Ireland ..... | 1,109                                      | —   | —  | —                               | —               | 1,081             | 60,002              | 81,062  |
| British West Indies and Bermuda .....     | —  | —   | —  | —                               | —               | —                 | 657                 | —       |
| Denmark .....                             | —  | —   | —  | 630                             | —               | —                 | 27,884              | 2,076   |
| Finland .....                             | 40   | —   | —  | —                               | —               | —                 | 5,703               | 10,833  |
| France .....                              | 1,350                                      | —   | —  | —                               | —               | 1,350             | 15,053              | 13,144  |
| Germany .....                             | 8,249                                      | —   | 2,426                                    | 13,499                          | —               | 5,148             | 214,625             | 152,007 |
| Italy .....                               | —  | —   | —  | —                               | —               | 1,927             | 3,227               | 3,462   |
| Netherlands .....                         | —  | —   | —  | —                               | —               | —                 | 46,503              | 43,478  |
| Norway .....                              | 8,932                                      | 629   | 676                                      | 4,406                           | 1,297           | 2,445             | 131,236             | 118,472 |
| Sweden .....                              | 2,271                                      | —   | —  | —                               | —               | —                 | 49,603              | 46,360  |
| Panama .....                              | 985  | —   | —  | —                               | —               | 1,107             | 2,092               | 8,752   |
| African Countries .....                   | —  | —   | —  | —                               | —               | —                 | 2,284               | —       |
| Total .....                               | 22,936                                     | 629   | 3,102                                    | 19,735                          | 1,297           | 13,058            | 572,607             | 515,197 |

SOURCE: D.B.S. 54-201, Annual  
CANAL STATISTICS (1958)

CANAL STATISTICS, 1958

TABLE 7. Number of Bushels of Grain Down-bound through Welland Ship Canal between Canadian and United States Ports

|  | Wheat       | Barley     | Oats       | Rye       | Corn       | Flaxseed   | Total       |
|--|-------------|------------|------------|-----------|------------|------------|-------------|
|  | bushels     |            |            |           |            |            |             |
| Canadian grain:                                  |             |            |            |           |            |            |             |
| From United States ports to Canadian ports:      |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | 171,767     | —          | —          | —         | —          | —          | 171,767     |
| From Canadian ports to United States ports:      |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | —           | —          | —          | —         | —          | —          | —           |
| From Canadian ports to Canadian ports:           |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | 110,674,966 | 51,237,791 | 20,739,235 | 1,550,178 | 1,621,250  | 9,225,964  | 195,049,384 |
| In United States vessels .....                   | —           | —          | —          | —         | —          | 96,892     | 96,892      |
| United States grain:                             |             |            |            |           |            |            |             |
| From United States ports to Canadian ports:      |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | 101,800     | —          | —          | 238,500   | 10,306,928 | 855,750    | 11,502,978  |
| In United States vessels .....                   | —           | —          | —          | —         | —          | —          | —           |
| From United States ports to United States ports: |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | —           | —          | —          | —         | —          | —          | —           |
| In United States vessels .....                   | 8,550,566   | 3,194,000  | —          | 1,601,607 | 557,928    | —          | 13,904,101  |
| From Canadian ports to Canadian ports:           |             |            |            |           |            |            |             |
| In Canadian vessels .....                        | 444,433     | —          | —          | —         | 1,543,071  | 2,317,928  | 4,305,432   |
| Total grain .....                                | 119,943,532 | 54,431,791 | 20,739,235 | 3,390,285 | 14,029,177 | 12,496,534 | 225,030,554 |
| Total Canadian grain in United States vessels    | —           | —          | —          | —         | —          | 96,892     | 96,892      |
| Total United States grain in Canadian vessels    | 546,233     | —          | —          | 238,500   | 11,849,999 | 3,173,678  | 15,808,410  |

TABLE 8. Freight Carried through St. Lawrence Canals by Country of Origin of Cargo and by Country of Registry of Vessel

| Country of registry of vessel            | Cargo of Canadian origin                            |  |                                | Cargo of United States origin                   |  |                           |                           |
|--|---|--|--------------------------------|---|--|---------------------------|---------------------------|
|  | Up  | Down   | Total                          | Up  | Down                                       | Total                     |                           |
|  | cargo tons  |  |                                |   |  |                           |                           |
| Canada .....                             | 3,933,832   | 5,255,302                                      | 9,189,134                      | 59,731  | 1,240,304                                  | 1,300,035                 |                           |
| United States .....                      | 100   | —  | 100                            | 825   | 29,181                                     | 30,006                    |                           |
| United Kingdom and Northern Ireland .... | 36,668  | 45,355   | 82,023                         | —   | 18,454                                     | 18,454                    |                           |
| Other .....                              | 17,140  | 170,788  | 187,928                        | —   | 332,469                                    | 332,469                   |                           |
| Total .....                              | 3,987,740   | 5,471,445                                      | 9,459,185                      | 60,556  | 1,620,408                                  | 1,680,964                 |                           |
|  | Cargo of United Kingdom and Northern Ireland origin |  |                                | Cargo of British West Indies and Bermuda origin | Cargo of Other British Commonwealth origin | Cargo of Belgian origin   | Cargo of Danish origin    |
|  | Up  | Down   | Total                          |   |  |                           | Cargo of Finnish origin   |
|  | cargo tons  |  |                                |   |  |                           |                           |
| Canada .....                             | 5,425   | —  | 5,425                          | 2,464   | —  | —                         | —                         |
| United States .....                      | —   | —  | —                              | —   | —  | —                         | —                         |
| United Kingdom and Northern Ireland .... | 36,027  | —  | 36,027                         | —   | 2,423                                      | —                         | —                         |
| Other .....                              | 111,842   | —  | 111,842                        | 10,549  | —  | 62,382                    | 10,826                    |
| Total .....                              | 153,294   | —  | 153,294                        | 13,013  | —  | 64,805                    | 10,826                    |
|  | Cargo of French origin                              | Cargo of German origin                         | Cargo of Greek origin          | Cargo of Italian origin                         | Cargo of Netherlands origin                | Cargo of Norwegian origin | Cargo of Portugese origin |
|  | cargo tons  |  |                                |   |  |                           |                           |
| Canada .....                             | —   | —  | —                              | 5,090   | —  | —                         | —                         |
| United States .....                      | —   | —  | —                              | —   | —  | —                         | —                         |
| United Kingdom and Northern Ireland .... | —   | —  | —                              | 891   | —  | —                         | 497                       |
| Other .....                              | 29,815  | 80,460   | 53                             | 30,368  | 36,618                                     | 20,519                    | 5,618                     |
| Total .....                              | 29,815  | 80,460   | 53                             | 36,349  | 36,618                                     | 20,519                    | 6,115                     |
|  | Cargo of Other European origin                      | Cargo of Central American and Caribbean origin | Cargo of South American origin | Cargo of Asian origin                           | Cargo of African origin                    | Total cargo               |                           |
|  |   |  |                                |   |  | Up                        | Down                      |
|  | cargo tons  |  |                                |   |  |                           |                           |
| Canada .....                             | 11,016  | 30,744   | 6,757                          | —   | 44,663                                     | 4,099,722                 | 6,495,606                 |
| United States .....                      | —   | —  | —                              | —   | —  | 925                       | 29,181                    |
| United Kingdom and Northern Ireland .... | 1,748   | —  | —                              | —   | —  | 78,254                    | 63,809                    |
| Other .....                              | 14,134  | 16,368   | 2,777                          | 100   | 661  | 491,346                   | 503,257                   |
| Total .....                              | 26,898  | 47,112   | 9,534                          | 100   | 45,324                                     | 4,670,247                 | 7,091,853                 |
|  | Grand total   |  |                                |   |  |                           |                           |
| Canada .....                             | 11,016  | 30,744   | 6,757                          | —   | 44,663                                     | 4,099,722                 | 6,495,606                 |
| United States .....                      | —   | —  | —                              | —   | —  | 925                       | 29,181                    |
| United Kingdom and Northern Ireland .... | 1,748   | —  | —                              | —   | —  | 78,254                    | 63,809                    |
| Other .....                              | 14,134  | 16,368   | 2,777                          | 100   | 661  | 491,346                   | 503,257                   |
| Total .....                              | 26,898  | 47,112   | 9,534                          | 100   | 45,324                                     | 4,670,247                 | 7,091,853                 |

SOURCE: D.B.S. 54-201, Annual  
CANAL STATISTICS (1958)





CANAL STATISTICS, 1958

TABLE 30. Water Freight Charges on the Great Lakes for Wheat - Concluded

| Fort William - Port Arthur<br>to | 1958                            |                              |                                   | 1957                            |                              |                                   |
|----------------------------------|---------------------------------|------------------------------|-----------------------------------|---------------------------------|------------------------------|-----------------------------------|
|                                  | Average<br>charge per<br>bushel | Average<br>charge per<br>ton | Average<br>charge per<br>ton-mile | Average<br>charge per<br>bushel | Average<br>charge per<br>ton | Average<br>charge per<br>ton-mile |
|                                  | cents                           | \$                           | cents                             | cents                           | \$                           | cents                             |
| Oderich and Georgian Bay ports:  |                                 |                              |                                   |                                 |                              |                                   |
| April .....                      | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| May .....                        | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| June .....                       | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| July .....                       | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| August .....                     | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| September .....                  | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| October .....                    | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| November .....                   | 5.50                            | 1.83                         | 0.341                             | 5.50                            | 1.83                         | 0.341                             |
| December .....                   | 6.10                            | 2.03                         | 0.378                             | 6.28                            | 2.09                         | 0.389                             |
| Average .....                    | 5.52                            | 1.84                         | 0.343                             | 5.54                            | 1.85                         | 0.345                             |
| Including storage .....          | 6.00                            | 2.00                         | 0.372                             | 5.90                            | 1.97                         | 0.367                             |
| Port Colborne:                   |                                 |                              |                                   |                                 |                              |                                   |
| April .....                      | 7.50                            | 2.50                         | 0.295                             | 7.50                            | 2.50                         | 0.295                             |
| May .....                        | 7.68                            | 2.56                         | 0.302                             | 7.50                            | 2.50                         | 0.295                             |
| June .....                       | 7.50                            | 2.50                         | 0.295                             | 7.50                            | 2.50                         | 0.295                             |
| July .....                       | 7.50                            | 2.50                         | 0.295                             | 7.50                            | 2.50                         | 0.295                             |
| August .....                     | 7.50                            | 2.50                         | 0.295                             | 7.50                            | 2.50                         | 0.295                             |
| September .....                  | 7.53                            | 2.51                         | 0.296                             | 7.50                            | 2.50                         | 0.295                             |
| October .....                    | 7.50                            | 2.50                         | 0.295                             | 7.50                            | 2.50                         | 0.295                             |
| November .....                   | 7.50                            | 2.50                         | 0.295                             | 7.85                            | 2.62                         | 0.309                             |
| December .....                   | 7.97                            | 2.66                         | 0.314                             | 8.50                            | 2.83                         | 0.334                             |
| Average .....                    | 7.58                            | 2.53                         | 0.298                             | 7.59                            | 2.53                         | 0.298                             |
| Including storage .....          | 7.97                            | 2.66                         | 0.314                             | 7.79                            | 2.60                         | 0.307                             |
| Buffalo and other U.S. ports:    |                                 |                              |                                   |                                 |                              |                                   |
| April .....                      | 8.00                            | 2.67                         | 0.310                             | —                               | —                            | —                                 |
| May .....                        | 7.98                            | 2.66                         | 0.309                             | 8.34                            | 2.78                         | 0.323                             |
| June .....                       | 7.63                            | 2.54                         | 0.295                             | 8.34                            | 2.78                         | 0.323                             |
| July .....                       | —                               | —                            | —                                 | 8.19                            | 2.73                         | 0.317                             |
| August .....                     | —                               | —                            | —                                 | 7.81                            | 2.60                         | 0.302                             |
| September .....                  | —                               | —                            | —                                 | 7.60                            | 2.53                         | 0.293                             |
| October .....                    | 8.00                            | 2.67                         | 0.310                             | 8.00                            | 2.67                         | 0.310                             |
| November .....                   | 8.37                            | 2.79                         | 0.324                             | 7.78                            | 2.59                         | 0.300                             |
| December .....                   | —                               | —                            | —                                 | —                               | —                            | —                                 |
| Average .....                    | 8.03                            | 2.68                         | 0.311                             | 8.09                            | 2.70                         | 0.313                             |
| Including storage .....          | —                               | —                            | —                                 | 8.54                            | 2.85                         | 0.331                             |
| Port Colborne to Montreal:       |                                 |                              |                                   |                                 |                              |                                   |
| April .....                      | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| Mat .....                        | 8.46                            | 2.82                         | 0.742                             | 8.50                            | 2.83                         | 0.745                             |
| June .....                       | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| July .....                       | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| August .....                     | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| September .....                  | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| October .....                    | 8.50                            | 2.83                         | 0.745                             | 8.74                            | 2.91                         | 0.766                             |
| November .....                   | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| December .....                   | 8.50                            | 2.83                         | 0.745                             | 8.50                            | 2.83                         | 0.745                             |
| Average .....                    | 8.50                            | 2.83                         | 0.745                             | 8.51                            | 2.84                         | 0.747                             |

SOURCE: D.B.S. 54-201-Annual,  
CANAL STATISTICS (1958)





TRAFFIC BY ORIGIN OF CARGO AND TYPE OF VESSEL  
1959 NAVIGATION SEASON

St. Lawrence Seaway  
(Montreal - Lake Ontario Section)

Table 3

| Origin <sup>(1)</sup> of Cargo and<br>Type of Vessel | Up                 |               |               |                 | Down                  |                    |               |               |
|--|--------------------|---------------|---------------|-----------------|-----------------------|--------------------|---------------|---------------|
|  | No. of<br>Transits | Gross<br>Tons | Cargo<br>Tons | Pass-<br>engers | Toll<br>Revenue<br>\$ | No. of<br>Transits | Gross<br>Tons | Cargo<br>Tons |
| <u>Canada:</u>                                       |                    |               |               |                 |                       |                    |               |               |
| Cargo  | 1,937              | 7,523,038     | 7,785,937     | -               | 3,540,054             | 1,394              | 5,460,204     | 4,445,151     |
| Cargo with Passengers                                | 32                 | 103,362       | 7,735         | 2,806           | 19,736                | 31                 | 149,605       | 45,302        |
| Scow or Barge  | 44                 | 17,447        | 36            | -               | 536                   | 57                 | 17,630        | 3,443         |
| Tanker   | 455                | 840,248       | 1,108,210     | -               | 462,667               | 463                | 1,026,817     | 131,628       |
| Tug  | 120                | 16,820        | -             | -               | 1,057                 | 127                | 17,761        | -             |
| Pleasure Craft                                       | 289                | 3,410         | -             | -               | 2,744                 | 242                | 5,211         | -             |
| Other  | 57                 | 67,291        | -             | -               | 2,526                 | 56                 | 49,948        | -             |
| Total - Canada                                       | 2,934              | 8,571,616     | 8,901,918     | 2,806           | 4,029,320             | 2,370              | 6,727,176     | 4,625,524     |
| <u>United States:</u>                                |                    |               |               |                 |                       |                    |               |               |
| Cargo  | 18                 | 82,398        | 19,946        | -               | 10,492                | 1,074              | 4,134,515     | 3,873,042     |
| Cargo with Passengers                                | 36                 | 76,341        | 6,184         | 615             | 6,499                 | 269                | 749,813       | 587,597       |
| Scow or Barge  | 13                 | 13,768        | 9,059         | -               | 639                   | 14                 | 16,927        | 18,589        |
| Tanker   | 9                  | 69,597        | 38,510        | -               | 18,063                | 73                 | 460,471       | 379,018       |
| Tug  | 20                 | 2,981         | -             | -               | 144                   | 24                 | 3,283         | -             |
| Pleasure Craft                                       | 36                 | 474           | -             | -               | 432                   | 106                | 1,297         | -             |
| Other  | 42                 | 150,798       | 3,677         | -               | 7,535                 | 13                 | 28,738        | -             |
| Total - United States                                | 174                | 396,357       | 77,376        | 615             | 43,804                | 1,573              | 5,395,044     | 4,858,246     |
| <u>Foreign:</u>                                      |                    |               |               |                 |                       |                    |               |               |
| Cargo  | 507                | 1,905,630     | 847,260       | -               | 683,636               | -                  | -             | -             |
| Cargo with Passengers                                | 278                | 870,311       | 510,849       | 393             | 453,117               | -                  | -             | -             |
| Tanker   | 91                 | 721,868       | 530,538       | -               | 239,400               | -                  | -             | -             |
| Other  | 3                  | 6,476         | -             | -               | 257                   | -                  | -             | -             |
| Total - Foreign                                      | 879                | 3,504,285     | 1,888,647     | 393             | 1,376,410             | -                  | -             | -             |
| GRAND TOTAL  | 3,987              | 12,472,258    | 10,867,941    | 3,814           | 5,449,534             | 3,943              | 12,122,220    | 9,483,770     |
|  |                    |               |               |                 |                       |                    |               | 4,035         |
|  |                    |               |               |                 |                       |                    |               | 4,440,162     |

(1) Origin means country in which cargo was loaded for Seaway transit.

SOURCE: The St. Lawrence Seaway Authority and the St. Lawrence Seaway Development Corp.  
TRAFFIC REPORT OF THE ST. LAWRENCE SEAWAY (1959)



TRAFFIC BY COMMODITY CLASSIFICATION AND NATIONALITY

1959 NAVIGATION SEASON

St. Lawrence Seaway  
(Montreal - Lake Ontario Section)

Table 13

| Commodity                      | From:<br>To: | Up        |               |               |               | Down    |               |               |               |
|--------------------------------|--------------|-----------|---------------|---------------|---------------|---------|---------------|---------------|---------------|
|                                |              | Canada    |               | United States |               | Canada  |               | United States |               |
|                                |              | Canada    | United States | Canada        | United States | Canada  | United States | Canada        | United States |
| Wheat                          |              | 2,452     | -             | -             | 4,257         | -       | -             | 2,617,736     | 242,145       |
| Corn                           |              | -         | -             | -             | -             | -       | -             | 33,827        | 32,801        |
| Oats                           |              | -         | -             | -             | -             | -       | -             | 282,245       | 4,640         |
| Barley                         |              | -         | 34            | -             | -             | -       | -             | 438,318       | 117,665       |
| Flour, Wheat                   |              | -         | -             | -             | -             | 9       | -             | 37,926        | 36,994        |
| Soybeans                       |              | -         | -             | -             | -             | -       | -             | 48,568        | 11,748        |
| Soybean Oil Cake and Meal      |              | 112       | -             | 2             | -             | 215     | -             | 4,561         | 117,187       |
| Beans and Peas                 |              | -         | -             | -             | -             | 236     | 29            | -             | 2,446         |
| Flaxseed                       |              | -         | -             | -             | -             | 3,191   | -             | 111,294       | 46,864        |
| Other Agricultural Products    |              | 2,065     | -             | -             | -             | -       | 1,780         | 75,650        | 13,668        |
| Packing House Products         |              | -         | -             | 449           | 8             | -       | -             | -             | 1,455         |
| Other Animal Products          |              | 1,080     | 5,237         | 719           | 11,324        | 243     | -             | 3,190         | 3,190         |
| Coal                           |              | 391,364   | 54,550        | -             | -             | 13,808  | -             | 12,891        | 902           |
| Coke                           |              | 1,180,338 | 4,991,617     | -             | -             | 15,052  | 3             | 1,605         | 10,461        |
| Iron Ore                       |              | -         | -             | -             | -             | 900     | 2,590         | -             | -             |
| Ores and Concentrates, Other   |              | -         | -             | -             | -             | 692     | -             | -             | 42            |
| Gravel and Sand                |              | -         | -             | -             | -             | -       | -             | -             | 290           |
| Stone, Crushed                 |              | -         | -             | -             | -             | -       | -             | -             | -             |
| Stone, Rough                   |              | -         | -             | -             | -             | 235     | 1,032         | 1,918         | -             |
| Petroleum, Crude               |              | 183,583   | -             | -             | -             | 102,337 | 10,042        | -             | 617           |
| Salt                           |              | -         | -             | -             | -             | -       | -             | 17,216        | 25            |
| Phosphate Rock                 |              | 45,705    | -             | 3,676         | -             | -       | -             | -             | -             |
| Sulphur                        |              | 50,607    | 34,617        | -             | 38            | -       | 4,815         | -             | -             |
| Other Mine Products            |              | 7,585     | 18,074        | -             | -             | 30,982  | 64,399        | 340           | -             |
| Pulpwood                       |              | 142,476   | 123,901       | -             | -             | 351     | 17,695        | -             | 687           |
| Other Forest Products          |              | -         | -             | -             | -             | 294     | 170           | 2,624         | 328           |
| Gasoline                       |              | 4,242     | -             | 4,987         | -             | -       | -             | 36,614        | -             |
| Fuel Oil                       |              | 714,132   | 54,402        | -             | -             | 247,797 | 47,091        | 1,588         | 837           |
| Lubricating Oils and Greases   |              | 118,781   | -             | -             | -             | 1,434   | -             | 1,434         | 4             |
| Petroleum Products, Other      |              | 3,501     | 16,469        | 2,101         | -             | 8,806   | 28,237        | 15,501        | 11            |
| Soybean Oil                    |              | -         | -             | -             | -             | -       | -             | 2,104         | 3,127         |
| Chemicals                      |              | -         | -             | -             | -             | 2,884   | 10,935        | 15,122        | 13,734        |
| Sodium Products                |              | 8,438     | 2,939         | -             | -             | 1,759   | 32            | -             | -             |
| Tar, Pitch and Creosote        |              | -         | -             | -             | -             | -       | -             | 17,549        | -             |
| Pig Iron                       |              | 3,377     | 8,704         | -             | -             | -       | -             | -             | -             |
| Iron and Steel Bars and Sheets |              | -         | 79,954        | -             | -             | 4,443   | 18,440        | 1,531         | 743           |
| Iron and Steel, Manufactured   |              | 224       | 551           | -             | -             | 22,175  | 92,158        | 9,919         | 351           |
| Cement                         |              | 15,079    | -             | -             | -             | 2,678   | 1,450         | 4,762         | -             |
| Woodpulp                       |              | 15,593    | 21,641        | -             | -             | 2,960   | 57,375        | -             | -             |
| Newsprint                      |              | -         | 277,133       | -             | -             | 1,957   | 353           | -             | -             |
| Syrup and Molasses             |              | -         | -             | -             | -             | 15,177  | 36,504        | -             | -             |
| Sugar                          |              | 1,059     | -             | -             | -             | 108,757 | 5,719         | -             | -             |
| Scrap Iron and Steel           |              | -         | 9,298         | -             | -             | 28      | 7,693         | -             | -             |
| Other Manufactures and Misc.   |              | 36,808    | 20,905        | 2,154         | -             | 34,383  | 84,193        | 16,213        | -             |
| Package Freight - Domestic     |              | 192,958   | 5,267         | -             | -             | -       | -             | 283,208       | -             |
| Package Freight - Foreign      |              | 21,225    | 485           | -             | -             | -       | -             | -             | -             |
| General and Mixed Cargo (1)    |              | 46        | 2,896         | 1,233         | 19,616        | 221,497 | 520,406       | 11,087        | 84,536        |
| T O T A L                      |              | 3,142,739 | 5,751,849     | 59,416        | 753           | 841,671 | 1,052,650     | 1,735,791     | 24,610        |

(1) Represents Unclassified Cargoes.

SOURCE: The St. Lawrence Seaway Authority and the St. Lawrence Seaway Development Corp.  
TRAFFIC REPORT OF THE ST. LAWRENCE SEAWAY (1959)









TOTAL TRAFFIC  
1959 NAVIGATION SEASON\*

Table 5

| Type of Vessel        | Up              |          |            |            |            | Down            |          |            |            |            |
|-----------------------|-----------------|----------|------------|------------|------------|-----------------|----------|------------|------------|------------|
|                       | No. of Transits | Net Tons | Gross Tons | Cargo Tons | Passengers | No. of Transits | Net Tons | Gross Tons | Cargo Tons | Passengers |
| Cargo                 | 694             | 364,534  | 556,924    | 159,613    | -          | 861             | 534,918  | 818,585    | 699,309    | -          |
| Cargo with Passengers | 2               | 1,558    | 2,793      | -          | 198        | 3               | 1,011    | 1,844      | 59         | 71         |
| Scow or Barge         | 435             | 226,555  | 213,895    | 2,736      | -          | 413             | 193,599  | 195,249    | 324,667    | -          |
| Tanker                | 23              | 18,239   | 30,612     | 18,130     | -          | 25              | 19,581   | 31,883     | 1,504      | -          |
| Tug                   | 520             | 34,742   | 54,247     | -          | -          | 513             | 33,141   | 52,452     | -          | -          |
| Pleasure Craft        | 46              | 466      | 544        | -          | -          | 48              | 518      | 600        | -          | -          |
| Other                 | 28              | 2,031    | 2,747      | 25         | -          | 25              | 2,095    | 2,997      | 25         | -          |
| T O T A L             | 1,748           | 648,125  | 861,762    | 180,504    | 198        | 1,888           | 784,893  | 1,103,610  | 1,025,564  | 71         |

\* Season April 25 to November 30.

SOURCE: The St. Lawrence Seaway Authority and the St. Lawrence Development Corp.,  
TRAFFIC REPORT OF THE ST. LAWRENCE SEAWAY (1959)

| NON-TOLL TRAFFIC                |              |         |           |
|---------------------------------|--------------|---------|-----------|
| 1959 NAVIGATION SEASON          |              |         |           |
| Sault Ste. Marie Canal (Canada) | (Cargo Tons) |         | Table 4   |
| Commodity                       | Bulk         | General | Total     |
| Wheat                           | 66,659       | -       | 66,659    |
| Oats                            | 28,922       | -       | 28,922    |
| Barley                          | 54,590       | -       | 54,590    |
| Mill Products                   | 41,397       | 18,679  | 60,076    |
| Malt                            | 40,479       | -       | 40,479    |
| Other Agricultural Products     | 27,225       | 274     | 27,499    |
| Animal Products                 | 73           | 18      | 91        |
| Gravel and Sand                 | 77,379       | -       | 77,379    |
| Other Mine Products             | 73,777       | 134     | 73,911    |
| Pulpwood                        | 41,447       | -       | 41,447    |
| Gasoline                        | 87,566       | -       | 87,566    |
| Fuel Oil                        | 150,770      | 73      | 150,843   |
| Iron and Steel, Manufactured    | 38,270       | 14,771  | 53,041    |
| Woodpulp                        | 34,057       | -       | 34,057    |
| Newsprint                       | 25,112       | 36,498  | 61,610    |
| Other Manufactures and Misc.    | 88,142       | 27,927  | 116,069   |
| Package Freight - Domestic      | 173,796      | -       | 173,796   |
| Package Freight - Foreign       | -            | 3,539   | 3,539     |
| General and Mixed Cargo (1)     | 5,319        | 26,076  | 31,395    |
| T O T A L                       | 1,054,980    | 127,989 | 1,182,969 |

(1) Represents Unclassified Cargoes.

SOURCE: The St. Lawrence Seaway Authority and the St. Lawrence Development Corp. - TRAFFIC REPORT OF THE ST. LAWRENCE SEAWAY (1959)







HARBOUR OF VANCOUVER

The harbour of Vancouver, situated in Burrard Inlet on the west coast of British Columbia, with direct access to the Pacific Ocean through the Straits of Georgia and Juan de Fuca, is served by the Canadian National, Canadian Pacific, Pacific Great Eastern, and Great Northern Railways. The entrance channel to the harbour, which is open the year round, has a minimum depth of 39 feet. The National Harbours Board has piers, wharves and jetties with about 11,900 linear feet of berthing, providing 21 deepsea berths and 3 berths for coastal shipping, also 6 transit sheds with an aggregate floor area of about 576,000 square feet. The Board's 4 grain elevators have a total storage capacity of 10,838,500 bushels, a combined loading capacity of about 200,000 bushels per hour and 1½ miles of conveyor galleries. Besides, there are storage tanks with a capacity of over 870,000 imperial gallons for the handling of fish and vegetable oils, open wharves, booming grounds and scow pools for the storage and shipment of timber. Three special wharves are also provided for the fishing industry, one being complete with a shed, a small ice plant and freezing equipment for processing fish. A 40-ton fixed derrick is installed on Lapointe Pier.

SHIPPING

VESSELS—ARRIVALS AND DEPARTURES

Statement showing number and net registered tonnage of vessels which arrived and departed during calendar year 1959, with comparisons for previous years.

|                    | Number<br>of<br>Vessels | Net<br>Registered<br>Tonnage |
|--------------------|-------------------------|------------------------------|
| <i>Arrivals—</i>   |                         |                              |
| 1959.....          | 29,099                  | 20,639,242                   |
| 1958.....          | 30,123                  | 18,803,504                   |
| 1957.....          | 31,433                  | 21,169,505                   |
| 1956.....          | 33,031                  | 21,675,067                   |
| 1955.....          | 32,773                  | 20,136,443                   |
| <i>Departures—</i> |                         |                              |
| 1959.....          | 28,973                  | 20,561,510                   |
| 1958.....          | 29,735                  | 18,845,713                   |
| 1957.....          | 30,997                  | 21,147,711                   |
| 1956.....          | 32,788                  | 21,542,409                   |
| 1955.....          | 32,315                  | 20,121,377                   |

(Exclusive of naval vessels)

SOURCE: Annual Report of the NATIONAL HARBOURS BOARD  
for Calendar Year 1959.

HARBOUR OF VANCOUVER

VESSELS—CLASSIFICATION

Statement showing classification, number and net registered tonnage of vessels which arrived and departed during calendar year 1959, with comparison for 1958.

| —   | 1959              |                        | 1958              |                        |
|---|-------------------|------------------------|-------------------|------------------------|
|   | Number of Vessels | Net Registered Tonnage | Number of Vessels | Net Registered Tonnage |
| <i>Arrivals—</i>                                      |                   |                        |                   |                        |
| Deepsea or ocean-going commercial.....                | 1,609             | 7,275,479              | 1,467             | 6,397,988              |
| Coastal or inland commercial (including fishery)..... | 27,490            | 13,363,763             | 28,656            | 12,405,516             |
| Other.....  |                   |                        |                   |                        |
| Total.....  | 29,099            | 20,639,242             | 30,123            | 18,803,504             |
| <i>Departures—</i>                                    |                   |                        |                   |                        |
| Deepsea or ocean-going commercial.....                | 1,591             | 7,200,331              | 1,496             | 6,487,177              |
| Coastal or inland commercial (including fishery)..... | 27,382            | 13,361,179             | 28,239            | 12,358,536             |
| Other.....  |                   |                        |                   |                        |
| Total.....  | 28,973            | 20,561,510             | 29,735            | 18,845,713             |

(Exclusive of naval vessels)

TRAFFIC

CARGO TONNAGE—SUMMARY

Statement showing water-borne cargo tonnage unloaded from and loaded to vessels during calendar year 1959, with comparisons for previous years.

Basis: Tons—weight (2,000 lbs.) or measurement (40 cu. ft.)

| —                | Inward    | Outward   | Total      |
|------------------|-----------|-----------|------------|
|                  | (Tons)    | (Tons)    | (Tons)     |
| <i>Foreign—</i>  |           |           |            |
| 1959.....        | 1,210,110 | 5,311,380 | 6,521,490  |
| 1958.....        | 1,020,507 | 5,280,253 | 6,300,760  |
| 1957.....        | 1,377,832 | 6,503,139 | 7,880,971  |
| 1956.....        | 1,657,486 | 5,765,332 | 7,422,818  |
| 1955.....        | 1,296,580 | 3,835,817 | 5,132,397  |
| <i>Domestic—</i> |           |           |            |
| 1959.....        | 3,004,178 | 1,909,311 | 4,913,489  |
| 1958.....        | 3,388,647 | 1,940,224 | 5,328,871  |
| 1957.....        | 3,217,351 | 2,024,178 | 5,241,529  |
| 1956.....        | 3,638,407 | 2,300,079 | 5,938,486  |
| 1955.....        | 3,821,188 | 2,031,427 | 5,852,615  |
| <i>Total—</i>    |           |           |            |
| 1959.....        | 4,214,288 | 7,220,691 | 11,434,979 |
| 1958.....        | 4,409,154 | 7,220,477 | 11,629,631 |
| 1957.....        | 4,595,183 | 8,527,317 | 13,122,500 |
| 1956.....        | 5,295,893 | 8,065,411 | 13,361,304 |
| 1955.....        | 5,117,768 | 5,867,244 | 10,985,012 |

(Exclusive of ballast (non-revenue), bunkers, ships' stores, mail and passengers' baggage)

SOURCE: Annual Report of the NATIONAL HARBOURS BOARD, for Calendar Year 1959.





TRANSPORTATION STATISTICS  
December, 1959

TABLE 2

|  | Canadian carriers   |  |            |  |   |   | Foreign carriers                                 |  | Grand total all services                                      | Year to date   |
|--|---|--|------------|--|---|---|--|--|---|--|
|  | Domestic services   |  |            | Trans-border services                        | Atlantic & Pacific services                   | Total   | Trans-border services                            | Atlantic & Pacific services                      |   |  |
|  | Scheduled carriers  | Non-scheduled carriers                                   |            |  |   |   |  |  |   |  |
|  |   |  |            |  |   |   |  |  |   |  |
| Passengers carried:<br>Revenue:<br>Unit toll transportation<br>Bulk transportation<br>Total revenue passengers carried                         | 249,949<br>2,444<br>252,393                               | 6,135<br>13,073<br>19,208                                | (1)        | 63,487<br>274<br>63,761                      | 17,733<br>211<br>17,944                       | 337,304<br>16,002<br>353,306                                  | 41,657<br>593<br>42,250                          | 7,381<br>120<br>7,501                            | 386,342<br>16,715<br>403,057                                  | 4,803,898<br>493,063<br>5,296,961                                    |
| Passenger miles - Unit toll transportation:<br>Revenue<br>Non-revenue<br>Total passenger miles   | 111,266,064<br>4,272,849<br>115,538,913                   | 876,775<br>41,477<br>918,252                             |            | 21,179,833<br>290,790<br>21,470,623          | 45,175,327<br>3,043,391<br>48,218,718         | 178,497,999<br>7,648,507<br>186,146,506                       | 2,496,265<br>59,911<br>2,556,176                 | 7,259,117<br>144,145<br>7,403,262                | 188,253,381<br>7,852,563<br>196,105,944                       | 2,481,338,052<br>102,531,449<br>2,583,869,501                        |
| Freight carried (lb.):<br>Revenue:<br>Unit toll transportation<br>Bulk transportation<br>Total revenue<br>Non-revenue<br>Total freight carried | 2,966,508<br>803,525<br>3,770,033<br>359,805<br>4,129,838 | 419,064<br>5,229,027<br>5,648,091<br>88,207<br>5,736,298 | (2)        | 770,859<br>-<br>770,859<br>15,611<br>786,470 | 440,587<br>-<br>440,587<br>170,582<br>611,169 | 4,597,018<br>6,032,552<br>10,629,570<br>634,205<br>11,263,775 | 650,539<br>-<br>650,539<br>10,588<br>(5) 661,127 | 454,840<br>-<br>454,840<br>36,081<br>(5) 490,921 | 5,702,397<br>6,032,552<br>11,734,949<br>680,874<br>12,415,823 | 61,470,214<br>123,718,288<br>185,188,502<br>9,063,792<br>194,252,294 |
| Freight ton miles - Unit toll transportation:<br>Revenue<br>Non-revenue<br>Total freight ton miles   | 1,210,065<br>184,859<br>1,394,924                         | 146,500<br>1,605<br>148,105                              |            | 128,248<br>2,502<br>130,750                  | 784,683<br>305,892<br>1,090,575               | 2,269,496<br>494,858<br>2,764,354                             | 22,403<br>833<br>(6) 23,236                      | 151,482<br>13,015<br>(6) 164,497                 | 2,443,381<br>508,706<br>2,952,087                             | 24,504,409<br>4,444,358<br>28,948,767                                |
| Express carried (lb.)-Unit toll transport.<br>Express ton miles<br>Excess baggage carried (lb.)<br>Excess baggage ton miles                    | 1,570,763<br>430,906<br>360,481<br>65,337                 | 43,026<br>3,804<br>9,517<br>2,072                        | (3)<br>(4) | 205,279<br>34,825<br>85,151<br>14,935        | -<br>-<br>32,790<br>37,832                    | 1,819,068<br>469,535<br>487,939<br>120,176                    | (7)<br>(8)<br>(7)<br>(8)                         | (7)<br>(8)<br>(7)<br>(8)                         | 1,819,068<br>469,535<br>487,939<br>120,176                    | 19,948,216<br>5,057,607<br>6,855,942<br>2,113,144                    |
| Mail carried (lb.)-Unit toll transportation<br>Mail ton miles-Unit toll transportation   | 3,265,606<br>1,116,157                                    | 147,300<br>17,935  |            | 227,883<br>41,409                            | 236,391<br>433,221                            | 3,877,180<br>1,608,722  | 175,878<br>5,889                                 | 126,722<br>62,133                                | 4,479,780<br>1,676,744  | 35,514,381<br>13,666,424   |

(1) Includes 6,722 division interline passengers.  
(2) Includes 46,586 lb. division interline freight.  
(3) Includes 3,121 lb. division interline express.  
(4) Includes 11,584 lb. division interline excess baggage.

(5) Includes express and excess baggage.  
(6) Includes express and excess baggage ton miles.  
(7) Included in freight carried.  
(8) Included in freight ton miles.



December, 1959

TABLE 3

|  | Canadian carriers |               |               |               |
|--|-------------------|---------------|---------------|---------------|
|  | Scheduled (1)     | Non-scheduled | Total         | Year-to-date  |
|  | \$                | \$            | \$            | \$            |
| Operating revenues:                        |                   |               |               |               |
| Unit toll transportation:                  |                   |               |               |               |
| Passengers                                 | 11,724,061        | 165,652       | 11,889,713    | 152,449,455   |
| Mail                                       | 1,381,012         | 100,557       | 1,481,569     | 13,440,677    |
| Freight                                    | 804,694           | 76,837        | 881,531       | 8,964,588     |
| Express                                    | 458,912           | 8,028         | 466,940       | 3,867,287     |
| Excess baggage                             | 126,195           | 5,367         | 131,562       | 1,717,347     |
| Total unit toll transportation             | 14,494,874        | 356,441       | 14,851,315    | 180,439,354   |
| Bulk transportation                        | 414,561           | 874,801       | 1,289,362     | 29,802,228    |
| Other flying services                      | 1,324             | 391,060       | 392,384       | 6,945,274     |
| Total flying services                      | 14,910,759        | 1,622,302     | 16,533,061    | 217,186,856   |
| Non-flying services                        | 470,699           | 291,430       | 762,129       | 4,431,229     |
| Total operating revenues                   | 14,440,060        | 1,913,732     | 16,353,792    | 221,618,085   |
| Operating expenses:                        |                   |               |               |               |
| Aircraft operation and maintenance         | 8,550,013         | 1,718,679     | 10,268,692    | 131,979,654   |
| Ground operation and maintenance           | 3,776,753         | 413,601       | 4,190,354     | 46,762,541    |
| Traffic                                    | 2,275,965         | 125,828       | 2,401,793     | 25,358,146    |
| General administration                     | 1,240,223         | 570,971       | 1,811,194     | 16,163,939    |
| General taxes                              | 95,646            | 12,531        | 108,177       | 998,194       |
| Total operating expenses                   | 15,938,600        | 2,841,610     | 18,780,210    | 221,262,474   |
| Operating income (or loss)                 |                   |               |               |               |
| Add non-operating income                   | Dr. 1,498,540     | Dr. 927,878   | Dr. 2,426,418 | 355,611       |
|  | 185,061           | 11,471        | 173,590       | 1,899,516     |
| Gross income                               | Dr. 1,313,479     | Dr. 939,349   | Dr. 2,252,828 | 2,255,127     |
| Deduct interest and other income charges   | 236,333           | Cr. 20,348    | 235,985       | 4,623,040     |
| Net income before income taxes             | Dr. 1,569,812     | Dr. 919,001   | Dr. 2,488,813 | Dr. 2,367,913 |
| Deduct provision for income taxes          | Cr. 74,404        | Cr. 37,027    | Cr. 111,431   | 468,238       |
| Net income (or deficit) after income taxes | Dr. 1,495,408     | Dr. 881,974   | Dr. 2,377,382 | Dr. 2,836,151 |
| Operating ratio                            | 110.4             | 148.5         | 114.8         | 99.8          |

(1) Includes Canadian trans-border, Atlantic and Pacific services.

Note: Revenues and expenses for foreign carriers not available.



DAWSON CITY

|                | 1955  |    | 1956  |    | 1957  |    | 1958  |    | 1959  |    |
|----------------|-------|----|-------|----|-------|----|-------|----|-------|----|
|                | MARCH |    | MARCH |    | MARCH |    | MARCH |    | MARCH |    |
|                | FROM  | TO | FROM  | TO | FROM  | TO | FROM  | TO | FROM  | TO |
| CALGARY        | 1     |    | 3     |    |       |    | 1     | 2  |       |    |
| EDMONTON       | 1     | 4  | 1     | 1  | 2     | 2  | 3     | 3  | 1     | 3  |
| FORT ST JOHN   |       |    | 1     | 1  |       |    |       |    | 2     | 2  |
| GRANDE PRAIRIE | 1     |    | 1     |    | 1     |    |       |    |       | 1  |
| MAYO           |       | 2  | 2     |    | 1     | 1  | 3     | 3  | 1     | 4  |
| OTTAWA         |       |    |       |    |       | 1  |       |    |       |    |
| PRINCE GEORGE  |       |    | 2     |    |       |    |       |    | 1     | 1  |
| TORONTO        |       |    |       |    | 1     |    |       |    |       |    |
| VANCOUVER      | 7     | 2  | 3     | 5  | 6     | 3  | 2     | 4  | 3     | 11 |
| VICTORIA       |       |    |       |    |       |    |       |    | 2     | 3  |
| WATSON LAKE    |       |    |       |    |       |    |       |    |       |    |
| WHITEHORSE     | 1     | 15 | 6     | 2  | 10    | 5  | 3     | 1  | 18    | 7  |
| WINNIPEG       |       |    |       |    |       |    | 1     | 1  | 2     | 2  |
| TOTAL          | 1     | 1  | 28    | 11 | 9     | 8  | 22    | 10 | 8     | 7  |
|                |       |    |       |    |       |    |       |    | 15    | 30 |
|                |       |    |       |    |       |    |       |    | 16    | 3  |
|                |       |    |       |    |       |    |       |    | 15    | 7  |
|                |       |    |       |    |       |    |       |    | 13    | 13 |

SOURCE: Prepared by the Statistics Section, Economics Division, on behalf of the Air Transport Board,  
ORIGIN AND DESTINATION STATISTICS - MAINLINE SCHEDULED TRAFFIC SURVEY OF REVENUE  
PASSENGERS (1955-1959)



## OIL PIPE LINE TRANSPORT

TABLE 2. Oil<sup>1</sup> Carried by Trunk Pipe Lines, 1958 and 1957

|   | 1958          | 1957          |
|---|---------------|---------------|
|   | barrels       |               |
| 1. Total received <sup>2</sup> (2 + 3 + 4 + 5) .....          | 401, 751, 143 | 416, 898, 490 |
| Less: Received from other Canadian pipe lines:                |               |               |
| 2. Own gathering system .....                                 | 98, 860, 281  | 101, 179, 892 |
| Other pipe lines:   |               |               |
| 3. Gathering .....  | 65, 601, 363  | 56, 355, 853  |
| 4. Trunk .....  | 107, 719, 151 | 123, 662, 680 |
| 5. Net received (6 + 7 + 8) .....                             | 129, 570, 348 | 135, 700, 065 |
| 6. Originating on own trunk line .....                        | 47, 810, 732  | 49, 380, 250  |
| 7. Received from foreign pipe line connections .....          | 78, 577, 075  | 81, 439, 690  |
| 8. Received from other carriers (rail and truck) .....        | 3, 182, 541   | 4, 880, 125   |
| 9. Total delivered <sup>2</sup> (10 + 11) .....               | 400, 894, 469 | 416, 153, 363 |
| 10. Less: Delivered to other Canadian trunk lines .....       | 128, 079, 021 | 127, 517, 732 |
| 11. Net delivered (12 + 13 + 14) .....                        | 272, 815, 448 | 288, 635, 631 |
| 12. Terminated on own trunk line .....                        | 183, 088, 977 | 186, 670, 011 |
| 13. Delivered to foreign pipe line connections .....          | 89, 180, 416  | 94, 582, 893  |
| 14. Delivered to other carriers (truck, rail and water) ..... | 546, 055      | 7, 382, 727   |

<sup>1</sup> Includes natural gasoline and products.<sup>2</sup> Includes duplications.TABLE 3. Oil<sup>1</sup> Carried by Gathering Pipe Lines, 1958 and 1957

|   | 1958          | 1957          |
|---|---------------|---------------|
|   | barrels       |               |
| 15. Total received (16 + 17) .....                      | 156, 362, 631 | 163, 646, 644 |
| 16. Less: Received from other gathering systems .....   | 5, 964, 856   | —             |
| 17. Net received (18 + 19) .....                        | 150, 397, 775 | 163, 646, 644 |
| 18. Originating on own gathering system .....           | 147, 868, 126 | 160, 747, 472 |
| 19. Received from other carriers (rail and truck) ..... | 2, 529, 649   | 2, 899, 172   |
| 20. Total delivered <sup>2</sup> (21 + 22 + 23) .....   | 156, 427, 314 | 163, 666, 927 |
| Less: Delivered to other pipe lines:                    |               |               |
| 21. Own trunk system .....                              | 98, 860, 610  | 101, 179, 892 |
| 22. Other pipe lines .....                              | 55, 609, 360  | 60, 265, 054  |
| 23. Net delivered (24 + 25) .....                       | 1, 957, 344   | 2, 221, 981   |
| 24. Terminated on gathering system .....                | 977, 905      | 840, 675      |
| 25. Delivered to other carriers (rail and truck) .....  | 979, 439      | 1, 381, 306   |

<sup>1</sup> Includes natural gasoline.<sup>2</sup> Includes duplications.

SOURCE: D.S.G. 55-201, Annual,

OIL PIPE LINE TRANSPORT (1958)-- Formerly Pipe Line (Oil) Statistics





GRAIN TRADE OF CANADA

TABLE 9. Distribution of Primary Shipments of Canadian Grain from Country Elevators,<sup>1</sup> Crop Year 1957-58

| Distribution   | Wheat       | Oats       | Barley      | Rye       | Flaxseed   | Corn    | Rapeseed <sup>2</sup> |
|--|-------------|------------|-------------|-----------|------------|---------|-----------------------|
| bushels  |             |            |             |           |            |         |                       |
| Forwarded: <sup>3</sup>                              |             |            |             |           |            |         |                       |
| By rail to:  |             |            |             |           |            |         |                       |
| Lakehead .....                                       | 175,458,552 | 55,377,039 | 77,522,498  | 5,300,144 | 9,521,684  | —       | 57,440                |
| Eastern elevators .....                              | 711,780     | 25,218     | —           | —         | —          | —       | 383,353               |
| Pacific seaboard .....                               | 130,183,175 | 1,968,627  | 29,987,237  | 1,428,862 | 5,760,390  | —       | 2,797,477             |
| Churchill, Manitoba .....                            | 17,054,558  | 1,023      | —           | —         | —          | —       | —                     |
| Interior public and semi-public terminals .....      | 1,419,633   | 675,120    | 2,249,939   | 5,425     | 77,018     | —       | 3,057,952             |
| Mills, maltsters, distillers and oil crushers ..     | 46,142,292  | 5,225,050  | 8,438,063   | 100,198   | 137,840    | 11,990  | 104,871               |
| Domestic shipments: <sup>4</sup>                     |             |            |             |           |            |         |                       |
| By rail to:  |             |            |             |           |            |         |                       |
| Canadian points, western division <sup>5</sup> ..... | 419,377     | 1,988,495  | 243,173     | 255,553   | 39,579     | 32,455  | —                     |
| Canadian points, eastern division .....              | 1,722,761   | 1,405,317  | 177,440     | —         | 1,088      | 763     | —                     |
| United States points .....                           | 12,683      | 476,288    | 4,608       | —         | —          | —       | —                     |
| Milled and processed .....                           | 1,149,728   | 41,723     | 42,280      | 3,778     | 2,834      | 96,004  | 86,590                |
| Totals, shipments .....                              | 374,274,519 | 67,183,898 | 118,665,238 | 7,093,960 | 15,540,433 | 141,212 | 6,487,683             |

<sup>1</sup> Includes grain milled or processed, by country elevator licensees.

<sup>2</sup> In bushels of 50 lb.

<sup>3</sup> Grain reappearing in subsequent visible supply returns.

<sup>4</sup> Grain not reappearing in subsequent visible supply returns.

<sup>5</sup> Includes local sales for feed, seed, etc.

TABLE 10. Receipts, Shipments and Stocks in Store of Canadian and United States Grain at Private Terminal and Mill Elevators in the Western Division,<sup>1</sup> Crop Year 1957-58

| Distribution                                | Wheat      | Oats      | Barley     | Rye     | Flaxseed | Corn   | Rapeseed <sup>2</sup> | U.S.A. corn |
|---|------------|-----------|------------|---------|----------|--------|-----------------------|-------------|
| bushels                                     |            |           |            |         |          |        |                       |             |
| Receipts                                    |            |           |            |         |          |        |                       |             |
| Car-lot receipts .....                      | 46,608,229 | 5,783,806 | 10,388,350 | 116,508 | 238,853  | 20,690 | 224,444               | 978,816     |
| Primary truck lot receipts .....            | 3,576,314  | 599,397   | 264,358    | 86,814  | 502,246  | —      | 353,705               | —           |
| Totals, receipts .....                      | 50,184,543 | 6,383,203 | 10,652,708 | 203,322 | 741,099  | 20,690 | 578,149               | 978,816     |
| Shipments                                   |            |           |            |         |          |        |                       |             |
| Primary shipments .....                     | 3,385,110  | 757,577   | 851,433    | 2,878   | 306,149  | —      | 198,852               | 127         |
| Milled, manufactured or sold for feed ..... | 45,793,439 | 5,689,728 | 9,315,435  | 181,597 | 462,327  | 21,746 | 373,200               | 990,229     |
| Totals, shipments .....                     | 49,178,549 | 6,447,305 | 10,166,868 | 184,475 | 768,476  | 21,746 | 572,052               | 990,356     |
| Stocks in store, July 31, 1958 .....        | 7,777,680  | 672,846   | 2,308,120  | 37,331  | 33,802   | 644    | 26,703                | 18,487      |

<sup>1</sup> Does not include private and mill elevators at Fort William—Port Arthur.

<sup>2</sup> In bushels of 50 lb.

TABLE 11. Distribution of Primary Shipments of Canadian and United States Grain from Private Terminal and Mill Elevators<sup>1</sup> in the Western Division,<sup>2</sup> Crop Year 1957-58

| Distribution   | Wheat      | Oats      | Barley     | Rye     | Flaxseed | Corn   | Rapeseed <sup>3</sup> | U.S.A. corn |
|--|------------|-----------|------------|---------|----------|--------|-----------------------|-------------|
| bushels  |            |           |            |         |          |        |                       |             |
| Forwarded: <sup>4</sup>                              |            |           |            |         |          |        |                       |             |
| By rail to:  |            |           |            |         |          |        |                       |             |
| Lakehead .....                                       | 1,971,575  | 513,659   | 628,102    | 1,629   | 55,004   | —      | 1,431                 | —           |
| Pacific seaboard .....                               | 455,965    | 8,823     | 16,643     | 1,249   | 239,199  | —      | —                     | —           |
| Interior terminals .....                             | 2,007      | 12,383    | —          | —       | 11,255   | —      | 197,421               | —           |
| Eastern elevators .....                              | 730,608    | —         | —          | —       | —        | —      | —                     | —           |
| Domestic shipments: <sup>5</sup>                     |            |           |            |         |          |        |                       |             |
| By rail to:  |            |           |            |         |          |        |                       |             |
| Canadian points, western division <sup>6</sup> ..... | 114,950    | 81,623    | 119,902    | —       | 691      | —      | —                     | 127         |
| Canadian points, eastern division .....              | 110,005    | 129,912   | 83,974     | —       | —        | —      | —                     | —           |
| United States points .....                           | —          | —         | 2,812      | —       | —        | —      | —                     | —           |
| Milled and processed .....                           | 45,793,439 | 5,689,728 | 9,315,435  | 181,597 | 462,327  | 21,746 | 373,200               | 990,229     |
| Exported overseas .....                              | —          | 11,177    | —          | —       | —        | —      | —                     | —           |
| Totals, shipments .....                              | 49,178,549 | 6,447,305 | 10,166,868 | 184,475 | 768,476  | 21,746 | 572,052               | 990,356     |

<sup>1</sup> Includes grain milled or processed, by private terminal and mill elevator licenses.

<sup>2</sup> Does not include private and mill elevators at Fort William—Port Arthur.

<sup>3</sup> In bushels of 50 lb.

<sup>4</sup> Grain reappearing in subsequent visible supply returns.

<sup>5</sup> Grain not reappearing in subsequent visible supply returns.

<sup>6</sup> Includes local sales for feed, seed, etc.

Note: Primary receipts or shipments refer to those originating outside the private terminal and mill elevator licensed system, either from the farms as primary truck lot receipts or receipts from or shipments to another licensed elevator not licensed as a private terminal or mill elevator.

SOURCE: D.B.C. 22-201- Annual,  
GRAIN TRADE OF CANADA (1957-58)



| Date |       | Description |  | Amount |  |
|------|-------|-------------|--|--------|--|
| 1890 | Jan 1 | Balance     |  | 100.00 |  |
|      | Feb 1 | Interest    |  | 5.00   |  |
|      | Mar 1 | Interest    |  | 5.00   |  |
|      | Apr 1 | Interest    |  | 5.00   |  |
|      | May 1 | Interest    |  | 5.00   |  |
|      | Jun 1 | Interest    |  | 5.00   |  |
|      | Jul 1 | Interest    |  | 5.00   |  |
|      | Aug 1 | Interest    |  | 5.00   |  |
|      | Sep 1 | Interest    |  | 5.00   |  |
|      | Oct 1 | Interest    |  | 5.00   |  |
|      | Nov 1 | Interest    |  | 5.00   |  |
|      | Dec 1 | Interest    |  | 5.00   |  |
| 1891 | Jan 1 | Balance     |  | 100.00 |  |
|      | Feb 1 | Interest    |  | 5.00   |  |
|      | Mar 1 | Interest    |  | 5.00   |  |
|      | Apr 1 | Interest    |  | 5.00   |  |
|      | May 1 | Interest    |  | 5.00   |  |
|      | Jun 1 | Interest    |  | 5.00   |  |
|      | Jul 1 | Interest    |  | 5.00   |  |
|      | Aug 1 | Interest    |  | 5.00   |  |
|      | Sep 1 | Interest    |  | 5.00   |  |
|      | Oct 1 | Interest    |  | 5.00   |  |
|      | Nov 1 | Interest    |  | 5.00   |  |
|      | Dec 1 | Interest    |  | 5.00   |  |
| 1892 | Jan 1 | Balance     |  | 100.00 |  |
|      | Feb 1 | Interest    |  | 5.00   |  |
|      | Mar 1 | Interest    |  | 5.00   |  |
|      | Apr 1 | Interest    |  | 5.00   |  |
|      | May 1 | Interest    |  | 5.00   |  |
|      | Jun 1 | Interest    |  | 5.00   |  |
|      | Jul 1 | Interest    |  | 5.00   |  |
|      | Aug 1 | Interest    |  | 5.00   |  |
|      | Sep 1 | Interest    |  | 5.00   |  |
|      | Oct 1 | Interest    |  | 5.00   |  |
|      | Nov 1 | Interest    |  | 5.00   |  |
|      | Dec 1 | Interest    |  | 5.00   |  |



DOMINION BUREAU OF STATISTICS

TABLE 61. Handlings of Canadian Grain at Eastern Elevators by Groups of Ports, Crop Year 1957-58 — Concluded

| Origin and destination               |   | Wheat<br>(Except Durum) | Durum<br>wheat | Oats       | Barley     |
|--------------------------------------|---|-------------------------|----------------|------------|------------|
|                                      |   | bushels                 |                |            |            |
| Lower St Lawrence ports <sup>3</sup> |   |                         |                |            |            |
| Receipts from:                       |   |                         |                |            |            |
| 1                                    | Western Canada .....                          | Rail                    | —              | 28,769     | —          |
| 2                                    | Fort William—Port Arthur .....                | Vessel                  | 2,439,963      | 100,892    | 2,252,202  |
| 3                                    |   | Rail                    | 19,514         | 1,557      | 91,186     |
| 4                                    | Eastern country points .....                  | Vessel                  | 451,359        | —          | —          |
| 5                                    |   | Rail                    | 247,694        | —          | 729,312    |
| 6                                    | United States Lake ports .....                | Vessel                  | 66,264         | —          | —          |
| Transfers from:                      |   |                         |                |            |            |
| 7                                    | Georgian Bay and upper Lake ports .....       | Vessel                  | 8,222,288      | —          | 188,044    |
| 8                                    |   | Rail                    | 24,533,033     | 6,354,673  | 268,884    |
| 9                                    | Lower Lake and upper St. Lawrence ports ..... | Vessel                  | 55,278,941     | 4,020,749  | 8,737,318  |
| 10                                   |   | Rail                    | 669,446        | —          | 20,685     |
| 11                                   | Lower St. Lawrence ports .....                | Vessel                  | 10,780         | —          | 47,000     |
| 12                                   |   | Rail                    | 36,686         | —          | 3,546      |
| 13                                   | Totals .....                                  | Vessel                  | 66,469,595     | 4,121,647  | 11,224,564 |
| 14                                   |   | Rail                    | 25,506,373     | 6,356,230  | 1,142,382  |
| 15                                   | Totals, receipts .....                        |                         | 91,975,968     | 10,477,877 | 12,366,946 |
| Shipments to:                        |   |                         |                |            |            |
| 16                                   | Canadian local domestic points .....          | Vessel                  | —              | —          | 2,924      |
| 17                                   |   | Rail                    | 6,980,721      | 379,587    | 9,931,892  |
| 18                                   | Canadian flour mills .....                    | Rail                    | 2,052,924      | 62,144     | 42,130     |
| 19                                   | Canadian manufacturing plants .....           | Rail                    | —              | —          | 2,412      |
| 20                                   | United States domestic points .....           | Rail                    | 2,664          | —          | 219,431    |
| 21                                   | Overseas clearances .....                     | Vessel                  | 82,507,424     | 9,453,401  | 1,901,736  |
| Transfers to:                        |   |                         |                |            |            |
| 22                                   | Lower St. Lawrence ports .....                | Vessel                  | 10,780         | —          | 47,000     |
| 23                                   |   | Rail                    | 39,784         | —          | 3,546      |
| 24                                   | Maritime ports .....                          | Rail                    | 8,337          | —          | —          |
| 25                                   | Totals .....                                  | Vessel                  | 82,518,204     | 9,453,401  | 1,951,660  |
| 26                                   |   | Rail                    | 9,084,430      | 441,731    | 10,199,411 |
| 27                                   | Totals, shipments .....                       |                         | 91,602,634     | 9,895,132  | 12,151,071 |
| Maritime ports <sup>4</sup>          |   |                         |                |            |            |
| Receipts from:                       |   |                         |                |            |            |
| 28                                   | Western Canada .....                          | Rail                    | —              | —          | —          |
| 29                                   | Fort William—Port Arthur .....                | Rail                    | —              | —          | 104,765    |
| 30                                   | Eastern Country points .....                  | Rail                    | 74,674         | —          | —          |
| Transfers from:                      |   |                         |                |            |            |
| 31                                   | Georgian Bay and upper Lake ports .....       | Rail                    | 20,533,694     | 3,124,701  | —          |
| 32                                   | Lower Lake and upper St. Lawrence ports ..... | Rail                    | 1,221,330      | —          | 7,978      |
| 33                                   | Lower St. Lawrence ports .....                | Rail                    | 8,000          | —          | —          |
| 34                                   | Totals .....                                  | Vessel                  | —              | —          | —          |
| 35                                   |   | Rail                    | 21,837,698     | 3,124,701  | 112,743    |
| 36                                   | Totals, receipts .....                        |                         | 21,837,698     | 3,124,701  | 112,743    |
| Shipments to:                        |   |                         |                |            |            |
| 37                                   | Canadian local domestic points .....          | Rail                    | 3,782          | 737        | 13,977     |
| 38                                   | Overseas clearances .....                     | Vessel                  | 25,366,288     | 2,961,012  | 98,766     |
| 39                                   | Totals .....                                  | Vessel                  | 25,366,288     | 2,961,012  | 98,766     |
| 40                                   |   | Rail                    | 3,782          | 737        | 13,977     |
| 41                                   | Totals, shipments .....                       |                         | 25,370,070     | 2,961,749  | 112,743    |

<sup>1</sup> Includes Port McNicoll, Midland, Collingwood, Owen Sound, Goderich, Sarnia and Walkerville.

<sup>2</sup> Includes Port Colborne, Humberstone, Toronto, Lakefield, Peterborough, Kingston and Prescott.

SOURCE: D.B.S. 22-201, Annual,  
GRAIN TRADE OF CANADA (1957-58)



GRAIN TRADE OF CANADA

TABLE 61. Handlings of Canadian Grain at Eastern Elevators by Groups of Ports, Crop Year 1957-58 — Concluded

| Rye       | Flaxseed  | Corn    | Soybeans  | Buckwheat | Peas    | Rapeseed   | Mixed grain | Sample grain | 10. |
|-----------|-----------|---------|-----------|-----------|---------|------------|-------------|--------------|-----|
| bushels   |           |         |           |           |         | pounds     |             |              |     |
| —         | —         | —       | —         | 27,568    | 229,280 | 49,116,700 | —           | 159,880      | 1   |
| 52,103    | 338,193   | —       | —         | —         | —       | —          | —           | —            | 2   |
| —         | 20,607    | —       | —         | 3,691     | —       | 1,925,730  | —           | 167,220      | 3   |
| —         | —         | 618,407 | 896,862   | —         | —       | —          | —           | —            | 4   |
| 295       | —         | 8,564   | 14,074    | 50,958    | 6,913   | —          | —           | —            | 5   |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 6   |
| —         | —         | 152,869 | 413,620   | —         | —       | —          | —           | 1,885,200    | 7   |
| —         | —         | —       | 1,327     | —         | —       | —          | —           | —            | 8   |
| 1,017,212 | 6,772,303 | —       | 585,631   | 92,518    | —       | —          | —           | 5,903,440    | 9   |
| —         | —         | —       | 32,604    | 34,567    | —       | —          | —           | —            | 10  |
| —         | 9,833     | —       | 54,769    | —         | —       | —          | —           | —            | 11  |
| —         | —         | 16,932  | —         | —         | —       | —          | —           | —            | 12  |
| 1,069,315 | 7,120,329 | 771,336 | 1,950,882 | 92,518    | —       | —          | —           | 7,788,640    | 13  |
| 295       | 20,607    | 25,496  | 48,005    | 116,784   | 236,193 | 51,042,430 | —           | 327,100      | 14  |
| 1,069,610 | 7,140,936 | 796,832 | 1,998,887 | 209,302   | 236,193 | 51,042,430 | —           | 8,115,740    | 15  |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 16  |
| 66,194    | 2,440     | 861,917 | 60        | 12,351    | —       | —          | —           | 10,624,465   | 17  |
| —         | —         | 5,786   | —         | 1,600     | —       | —          | —           | —            | 18  |
| 166,311   | 1,792,795 | 6,075   | —         | —         | —       | —          | —           | —            | 19  |
| —         | —         | —       | —         | 2,689     | —       | —          | —           | —            | 20  |
| 928,873   | 5,474,620 | —       | 1,798,141 | 192,277   | 236,511 | 51,554,960 | —           | —            | 21  |
| —         | 9,828     | —       | 54,825    | —         | —       | —          | —           | —            | 22  |
| —         | —         | 15,448  | —         | —         | —       | —          | —           | —            | 23  |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 24  |
| 928,873   | 5,484,448 | —       | 1,852,966 | 192,277   | 236,511 | 51,554,960 | —           | —            | 25  |
| 232,505   | 1,795,235 | 889,226 | 60        | 16,640    | —       | —          | —           | 10,624,465   | 26  |
| 1,161,378 | 7,279,683 | 889,226 | 1,853,026 | 208,917   | 236,511 | 51,554,960 | —           | 10,624,465   | 27  |
| —         | —         | —       | —         | —         | 60,441  | 683,770    | —           | —            | 28  |
| 2,148     | 2,172,682 | —       | —         | 64,025    | —       | 1,273,480  | —           | —            | 29  |
| —         | —         | —       | 50,093    | —         | 2,538   | —          | —           | —            | 30  |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 31  |
| 7,977     | —         | —       | 278,968   | 68,090    | —       | —          | —           | —            | 32  |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 33  |
| —         | —         | —       | —         | —         | —       | —          | —           | —            | 34  |
| 10,125    | 2,172,682 | —       | 329,061   | 132,115   | 62,979  | 1,957,250  | —           | —            | 35  |
| 10,125    | 2,172,682 | —       | 329,061   | 132,115   | 62,979  | 1,957,250  | —           | —            | 36  |
| —         | 1,489     | —       | —         | —         | —       | —          | —           | —            | 37  |
| 10,125    | 2,172,682 | —       | 329,061   | 132,115   | 62,979  | 1,957,250  | —           | —            | 38  |
| 10,125    | 2,172,682 | —       | 329,061   | 132,115   | 62,979  | 1,957,250  | —           | —            | 39  |
| —         | 1,489     | —       | —         | —         | —       | —          | —           | —            | 40  |
| 10,125    | 2,174,171 | —       | 329,061   | 132,115   | 62,979  | 1,957,250  | —           | —            | 41  |

<sup>3</sup> Includes Montreal, Sorel, Three Rivers and Quebec.

<sup>4</sup> Includes Saint John, West Saint John and Halifax.





TABLE 2. Inventories,<sup>1</sup> 1958

|   | Raw materials and supplies | Goods in process | Finished goods of own manufacture | Total     |
|---|----------------------------|------------------|-----------------------------------|-----------|
| dollars   |                            |                  |                                   |           |
| Opening:  |                            |                  |                                   |           |
| Prince Edward Island, Nova Scotia and New Brunswick ..... | 227,828                    | 44,520           | 243,286                           | 515,634   |
| Quebec .....  | 160,035                    | 45,506           | 103,594                           | 309,135   |
| Ontario .....   | 782,407                    | 575,395          | 361,529                           | 1,719,331 |
| Manitoba, Alberta and British Columbia .....              | 312,146                    | 175,770          | 160,768                           | 648,684   |
| Canada .....  | 1,482,416                  | 841,191          | 869,177                           | 3,192,784 |
| Closing:  |                            |                  |                                   |           |
| Prince Edward Island, Nova Scotia and New Brunswick ..... | 259,186                    | 46,327           | 385,813                           | 691,326   |
| Quebec .....  | 180,802                    | 45,769           | 153,256                           | 379,827   |
| Ontario .....   | 766,646                    | 473,094          | 415,193                           | 1,654,933 |
| Manitoba, Alberta and British Columbia .....              | 313,780                    | 264,182          | 166,843                           | 744,805   |
| Canada .....  | 1,520,414                  | 829,372          | 1,121,105                         | 3,470,891 |

<sup>1</sup> (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.  
(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized results for the Boat Building Industry for the Year under review are shown in the above table.  
(c) The opening inventory for 1958 does not necessarily agree with the closing inventory for 1957, because of the addition of new plants, the transfer of plants to other industries and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the changes mentioned above.

TABLE 3. Products of the Boat Building Industry, 1957 and 1958

| Product   | 1957     |                            | 1958     |                            |
|---|----------|----------------------------|----------|----------------------------|
|   | Quantity | Value of factory shipments | Quantity | Value of factory shipments |
|   | No.      | \$                         | No.      | \$                         |
| Canoes .....  | 4,066    | 424,542                    | 4,577    | 489,210                    |
| Rowboats, skiffs, dories, etc. ....   | 3,419    | 321,079                    | 4,726    | 518,922                    |
| Sailboats .....   | 106      | 126,152                    | 180      | 213,456                    |
| Outboard boats <sup>1</sup> .....   | 14,861   | 5,225,013                  | 19,138   | 5,177,247                  |
| Motor-boats .....   | 422      | 1,719,856                  | 744      | 1,803,283                  |
| Lifeboats and whaleboats .....  | 109      | 184,488                    | 77       | 125,621                    |
| Other boats .....   | 7,912    | 2,050,951                  | 409      | 957,060                    |
| Oars and paddles .....  | ..       | 102,868                    | ..       | 85,354                     |
| Marine and fishermen's supplies .....                                       | ..       | 188,045                    | ..       | 147,450                    |
| All other products .....  | ..       | 503,457                    | ..       | 948,773                    |
| Amount received for custom work, repairs, and boat livery and storage ..... | ..       | 2,039,480                  | ..       | 1,825,585                  |
| Total .....   | ..       | 12,885,931                 | ..       | 12,291,961                 |

<sup>1</sup> Did not include hulls for outboard boats which were included in "Other boats" in 1957 but includes hulls in 1958.

SOURCE: D.B.S. 52-205, Annual,  
THE BOAT BUILDING INDUSTRY (1958)



THE BOAT BUILDING INDUSTRY

TABLE 4. Materials Used in the Boat Building Industry, 1957 and 1958

| Material  | 1957     |               | 1958     |               |
|---|----------|---------------|----------|---------------|
|   | Quantity | Cost at works | Quantity | Cost at works |
|   |          | \$            |          | \$            |
| Lumber (rough and planed), softwood (pine, spruce etc.) M ft. b.m.    | 4,059    | 687,356       | 3,989    | 652,489       |
| Lumber (rough or planed), hardwood (birch, oak, basswood, etc.) ..... | 3,474    | 730,099       | 2,171    | 334,582       |
| Veneer ..... M surface ft.  | 10,093   | 265,296       | 6,407    | 225,905       |
| Plywood .....   | 1,407    | 328,177       | 1,044    | 286,199       |
| Iron and steel, all forms .....                                       | ..       | 79,020        | ..       | 100,898       |
| Aluminum - Castings .....   | 1,660    | 962           | 2,500    | 2,390         |
| Sheet .....   | 343,170  | 188,758       | 182,759  | 87,220        |
| Other forms .....   | 24,800   | 12,603        | 85,307   | 51,580        |
| Other non-ferrous metals .....  | ..       | 21,197        | ..       | 16,682        |
| Hardware .....  | ..       | ..            | ..       | 157,558       |
| Fibreglass .....  | ..       | ..            | ..       | 152,369       |
| All other materials and process supplies .....                        | ..       | 3,242,401     | ..       | 3,123,764     |
| Total .....   | ...      | 5,555,869     | ...      | 5,191,636     |

TABLE 5. Principal Statistics of the Boat Building Industry in Canada, Grouped According to Selling Value of Factory Shipments, 1957 and 1958

| Establishments reporting factory shipments | Estab-lish-ments | Employees | Salaries and wages | Cost at plant of materials used | Selling value of factory shipments |
|--|------------------|-----------|--------------------|---------------------------------|------------------------------------|
|  | number           |           | dollars            |                                 |                                    |
| 1957                                       |                  |           |                    |                                 |                                    |
| Under \$10,000 .....                       | 65               | 86        | 190,812            | 85,544                          | 296,881                            |
| \$10,000 to \$24,999 .....                 | 50               | 160       | 418,636            | 279,351                         | 792,478                            |
| \$25,000 to \$49,999 .....                 | 33               | 198       | 551,065            | 493,599                         | 1,207,482                          |
| \$50,000 to \$99,999 .....                 | 28               | 271       | 808,112            | 931,356                         | 1,948,206                          |
| \$100,000 to \$199,999 .....               | 14               | 256       | 775,900            | 855,834                         | 1,804,414                          |
| \$200,000 to \$499,999 .....               | 13               | 435       | 1,469,547          | 1,732,251                       | 3,873,318                          |
| \$500,000 to \$999,999 .....               | 1                | 351       | 1,129,528          | 1,177,934                       | 2,963,152                          |
| \$1,000,000 to \$4,999,999 .....           | 2                |           |                    |                                 |                                    |
| Total .....                                | 206              | 1,757     | 5,343,600          | 5,555,869                       | 12,885,931                         |
| 1958                                       |                  |           |                    |                                 |                                    |
| Under \$10,000 .....                       | 62               | 109       | 219,046            | 165,585                         | 342,147                            |
| \$10,000 to \$24,999 .....                 | 60               | 216       | 504,229            | 415,741                         | 974,972                            |
| \$25,000 to \$49,999 .....                 | 41               | 257       | 715,351            | 647,116                         | 1,538,141                          |
| \$50,000 to \$99,999 .....                 | 21               | 214       | 604,059            | 739,282                         | 1,573,606                          |
| \$100,000 to \$199,999 .....               | 19               | 313       | 1,093,606          | 1,056,319                       | 2,684,675                          |
| \$200,000 to \$499,999 .....               | 8                | 244       | 929,618            | 877,189                         | 2,272,828                          |
| \$500,000 to \$999,999 .....               | 3                | 380       | 1,207,915          | 1,290,404                       | 2,905,592                          |
| \$1,000,000 to \$4,999,999 .....           | 1                |           |                    |                                 |                                    |
| Total .....                                | 215              | 1,733     | 5,273,824          | 5,191,636                       | 12,291,961                         |

SOURCE: D.B.S. 42-205, Annual,  
THE BOAT BUILDING INDUSTRY (1958)







USE ACCO PAPER FASTENERS FOR BINDING

**ACCOPRESS BINDER**

No. BG 3007

MADE BY  
**ACCO CANADIAN CO. LIMITED**  
TORONTO, ONTARIO



